APPLIED SIGNAL TECHNOLOGY INC Form PRER14A February 02, 2010

## Schedule 14A

Schedule 14A Information
Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

	by the Registrant [X]
	by a Party other than the Registrant [ ]
	ck the appropriate box:
[X]	Preliminary Proxy Statement
[]	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
[]	Definitive Proxy Statement
[]	Definitive Additional Materials
[ ]	Soliciting Material Pursuant to § 240.14a-11(c) or § 240.14a-12
	Applied Signal Technology, Inc.
	(Name of Registrant as Specified in its Charter)
	Applied Signal Technology, Inc.
	Applied Signal Technology, Inc. James E. Doyle
	Vice President-Finance, CFO
	400 West California Avenue
	Sunnyvale, CA 94086
Pavr	nent of Filing Fee (Check the appropriate box):
[X]	No fee required.
[ ]	Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
	(1) Title of each class of securities to which transaction applies:
	(2) Aggregate number of securities to which transaction applies:
	(2) Aggregate number of securities to which transaction applies.
	(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11
	(set forth the amount on which the filing fee is calculated and state how it was determined):
	(4) Proposed maximum aggregate value of transaction:
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[]	Fee paid previously with preliminary materials.
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(1) Amount Previously Paid:				
(2) Form, Schedule or Registration Statement No.:				
(3) Filing Party:				
(4) Date Filed:				

February 5, 2010

#### Dear Shareholder:

The Applied Signal Technology, Inc. Annual Meeting of Shareholders will be held on Wednesday, March 17, 2010, 4:00 p.m. Pacific Time, at the Sheraton Hotel, located at 1100 N. Mathilda Avenue, Sunnyvale, California 94086. You are cordially invited to attend.

The Notice of Annual Meeting of Shareholders and a Proxy Statement, which describe the formal business to be conducted at the meeting, follow this letter. The matters to be acted upon are described in the Notice of Annual Meeting of Shareholders and Proxy Statement. Our Annual Report to Shareholders is also provided for your information.

We are pleased to continue to apply the Securities and Exchange Commission rule allowing companies to furnish proxy materials to their shareholders over the Internet. On February 5, 2010, we mailed to our shareholders a Notice of Internet Availability of Proxy Materials (the "Notice") containing instructions on how to access our 2010 Proxy Statement and Annual Report to Shareholders. The Notice also provides instructions on how to vote online or by telephone and includes instructions on how to receive a paper copy of the proxy materials by mail. If you received your annual meeting materials by mail, the Notice of Annual Meeting of Shareholders, Proxy Statement, Annual Report to Shareholders and proxy card were enclosed.

Whether or not you plan to attend the meeting, your vote is important and we encourage you to vote promptly. You may vote your shares via a toll-free telephone number or over the Internet, as described in the proxy materials, or, if you received a paper copy of the proxy card by mail, you may mark, sign, and date the proxy card and return it in the envelope provided. Instructions regarding all three methods of voting are provided on the proxy card. If you hold your shares through an account with a brokerage firm, bank or other nominee, please follow the instructions you receive from them to vote your shares.

Sincerely,

William B. Van Vleet III Chief Executive Officer

## Applied Signal Technology, Inc.

#### Notice of Annual Meeting of Shareholders to be Held on Wednesday, March 17, 2010

#### To the Shareholders:

Notice is hereby given that the 2010 Annual Meeting of the Shareholders of Applied Signal Technology, Inc., a California corporation, will be held on Wednesday, March 17, 2010, 4:00 p.m. Pacific Time, at the Sheraton Hotel, located at 1100 N. Mathilda Avenue, Sunnyvale, California 94086, for the following purposes:

To elect three Class II directors to hold office for a two-year term ending at our Annual Meeting to be held in 2012 and until their respective successors are elected and qualified.

To consider an amendment to our Articles of Incorporation to increase the number of authorized shares of Common Stock from 20,000,000 to 35,000,000.

To consider a proposal to ratify the appointment of Ernst & Young LLP as the independent accountants of Applied Signal Technology, Inc. for the fiscal year ending October 31, 2010.

To transact such other business as may properly come before the meeting.

Shareholders of record at the close of business on January 19, 2010, are entitled to notice of, and to vote at, this meeting and any adjournment or postponement thereof. For ten days prior to the meeting, a complete list of shareholders entitled to vote at the meeting will be available for examination by any shareholder, for any purpose relating to the meeting, during ordinary business hours at our principal offices located at 460 West California Avenue, Sunnyvale, California 94086.

By order of the Board of Directors,

William B. Van Vleet III Chief Executive Officer

Sunnyvale, California February 5, 2010

IMPORTANT: Your vote is important. Whether or not you plan to attend the Annual Meeting, we encourage you to read this proxy statement and submit your proxy or voting instructions as soon as possible. For specific instructions on how to vote your shares, please refer to the instructions on the Notice of Internet Availability of Proxy Materials ("Notice") you received in the mail, the questions and answers in the section entitled "Information about the Annual Meeting and Voting" on page 3 of this proxy statement, or, if you requested to receive printed proxy materials, your enclosed proxy card.

#### INTERNET AVAILABILITY OF PROXY MATERIALS

This year, in accordance with U.S. Securities and Exchange Commission rules, we are again using the Internet as our primary means of furnishing proxy materials to shareholders. Consequently, most shareholders will not receive paper copies of our proxy materials. We will instead send these shareholders a Notice of Internet Availability of Proxy Materials with instructions for accessing the proxy materials, including our proxy statement and annual report, and voting via the Internet. The Notice of Internet Availability of Proxy Materials also provides information on how shareholders may obtain paper copies of our proxy materials if they so choose. If you previously elected to receive our proxy materials electronically, these materials will continue to be sent via email unless you change your election.

# Proxy Statement 2010 Annual Meeting of Shareholders

The enclosed proxy is solicited on behalf of the Board of Directors of Applied Signal Technology, Inc., a California corporation, for use at our 2010 Annual Meeting of Shareholders to be held on Wednesday, March 17, 2010, and at any adjournment or postponement thereof, referred to in this proxy statement as the Annual Meeting. The Annual Meeting will be held at 4:00 p.m. Pacific Time at the Sheraton Hotel, located at 1100 N. Mathilda Avenue, Sunnyvale, California 94086. The proxy solicitation materials were first mailed (or made available electronically, for shareholders who elect to access these materials over the Internet) on or about February 5, 2010, to all shareholders entitled to vote at the Annual Meeting.

## Information about the Annual Meeting and Voting

#### Why am I receiving these proxy materials?

Our Board of Directors has made these materials available to you on the Internet, or, at your request, has delivered printed proxy materials to you, in connection with the solicitation of proxies for use at our 2010 Annual Meeting of Shareholders, which will take place on Wednesday, March 17, 2010, at 4:00 p.m. local time, the Sheraton Hotel, located at 1100 N. Mathilda Avenue, Sunnyvale, California 94086. As a shareholder, you are invited to attend the Annual Meeting and are requested to vote on the items of business described in this proxy statement.

#### What information is contained in this proxy statement?

The information in this proxy statement relates to the proposals to be voted upon at the Annual Meeting, the voting process, the compensation of our directors and our most highly paid executive officers, and certain other required information.

#### Why did I receive a notice in the mail regarding the Internet availability of proxy materials instead of a full set of proxy materials?

In accordance with rules of the Securities and Exchange Commission (the "SEC"), we are furnishing our proxy materials, including this proxy statement and our 2009 Annual Report to Shareholders, to our shareholders by providing access to such documents on the Internet instead of mailing printed copies. Most shareholders will not receive printed copies of the proxy materials unless they request them. Instead, the Notice, which was mailed to most of our shareholders, will instruct you as to how you may access and review all of the proxy materials on the Internet. The Notice also instructs you as to how you may submit your proxy on the Internet. If you would like to receive a paper or email copy of our proxy materials, you should follow the instructions for requesting such materials in the Notice.

#### How do I get electronic access to the proxy materials?

The Notice will provide you with instructions regarding how to:

- View our proxy materials for the Annual Meeting on the Internet; and
- Instruct us to send our future proxy materials to you electronically by email.

Choosing to receive your future proxy materials by email will reduce the cost of printing and mailing documents to you and will reduce the impact of printing and mailing these materials on the environment. If you choose to receive future proxy materials by email, you will receive an email next year with instructions containing a link to those materials and a link to the proxy voting site. Your election to receive proxy materials by email will remain in effect until you terminate it.

## Who is entitled to vote at the Annual Meeting?

To be able to vote, you must have been a shareholder on January 19, 2010, the record date for determination of shareholders entitled to notice of, and to vote at, the Annual Meeting (the "Record Date"). As of the Record Date, 13,302,602 shares of our common stock were issued and outstanding.

Our stock transfer books will remain open between the Record Date and the date of the Annual Meeting. A list of shareholders entitled to vote at the Annual Meeting will be available for inspection at our offices located at 460 West California Avenue, Sunnyvale, California 94086.

Shareholder of Record: Shares Registered in Your Name. If at the close of business on the Record Date, your shares were registered directly in your name with our transfer agent, BNY Mellon Shareowner Services, or Mellon, then you are a shareholder of record and the Notice was sent directly to you by Applied Signal Technology. As a shareholder of record, you may vote in person at the meeting or vote by proxy. If you requested to receive printed proxy materials, we have enclosed or sent a proxy card for you to use. You may also vote on the Internet or by telephone, as described in the Notice and below under the heading "How can I vote my shares without attending the Annual Meeting?" Whether or not you plan to attend the meeting, we urge you to vote your shares or complete and return the accompanying proxy card to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker, Bank, or Other Agent. If, at the close of business on the Record Date, your shares were not issued directly in your name, but rather were held in an account at a brokerage firm, bank, or other agent, you are the beneficial owner of shares held in "street name" and the Notice was forwarded to you by your broker, bank, or other agent. The broker, bank, or other agent holding your shares in that account is considered to be the shareholder of record for purposes of voting at the Annual Meeting.

As a beneficial owner, you have the right to direct your broker, bank, or other agent on how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, since you are not the shareholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy issued in your name from your broker, bank, or other agent. If you do not wish to vote in person or you will not be attending the Annual Meeting, you may vote by proxy. You may vote by proxy or over the Internet or by telephone, as

described in the Notice and below under the heading "How can I vote my shares without attending the Annual Meeting?"

## Why am I being asked to vote?

There are three matters scheduled for a vote at the Annual Meeting:

- 1 The election of three Class II members of the Board of Directors to hold office until our 2012 Annual Meeting of Shareholders.
- 2. The approval of an amendment to our Articles of Incorporation to increase the number of authorized shares of Common Stock from 20,000,000 to 35,000,000.
- 3. The ratification of the selection by the Audit Committee of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending October 31, 2010.

We will also consider any other business that properly comes before the Annual Meeting.

#### How does the Board of Directors recommend that I vote?

Our Board of Directors recommends that you vote your shares "FOR" each of the nominees for Class II of the Board of Directors, "FOR" the approval of an amendment to our Articles of Incorporation to increase the number of authorized shares of Common Stock from 20,000,000 to 35,000,000, and "FOR" the ratification of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending October 31, 2010.

#### How many votes do I have?

Each holder of common stock is entitled to one vote per share held. As of the Record Date, 13,302,602 votes may be cast on each matter at the Annual Meeting.

#### What is a quorum?

For business to be conducted at the Annual Meeting, a quorum must be present. The presence at the Annual Meeting, either in person or by proxy, of holders of shares of outstanding common stock entitled to vote and representing a majority of the voting power of such shares will constitute a quorum for the transaction of business. At the close of business on the Record Date, there were 13,302,602 shares outstanding and entitled to vote.

Abstentions and "broker non-votes" (that is, shares held by a broker or nominee that are represented at the meeting, but with respect to which such broker or nominee is not instructed to vote on a particular proposal and does not have discretionary voting power) will be counted for the purpose of determining whether a quorum is present for the transaction of business.

Your shares will be counted toward the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank, or other agent) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted toward the quorum requirement. If there is no quorum, the chairperson of the meeting, or a majority of the votes present at the meeting, may adjourn the meeting to another date.

#### How are votes counted?

In the election of directors, you may vote "FOR" all or some of the nominees or your vote may be "WITHHELD" with respect to one or more of the nominees. For the other items of business, you may vote "FOR," "AGAINST," or "ABSTAIN." If you elect to "ABSTAIN," the abstention has the same effect as a vote "AGAINST." If you provide specific instructions with regard to certain items, your shares will be voted as you instruct on such items. If no instructions are indicated, the shares will be voted as recommended by the Board of Directors.

#### What vote is required to approve each of the proposals?

- For the election of directors, the three nominees in Class II receiving the highest number of affirmative "FOR" votes at the Annual Meeting (among votes properly cast in person or by proxy) will be elected. Cumulative voting is not permitted for the election of directors.
- To be approved, the amendment to our Articles of Incorporation to increase the number of authorized shares of Common Stock from 20,000,000 to 35,000,000 must receive a "FOR" vote from a majority of our outstanding shares of Common Stock voting "FOR" such proposal.
- To be approved, the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm must receive a "FOR" vote from a majority of shares present and entitled to vote either in person or by proxy.

If you hold your shares beneficially in street name and do not provide your broker with voting instructions, your shares may constitute "broker non-votes." Generally, broker non-votes occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. Abstentions are considered votes cast and thus have the same effect as votes against the matter.

#### How can I vote my shares in person at the Annual Meeting?

Shares held in your name as the shareholder of record may be voted by you in person at the Annual Meeting. Shares held beneficially in street name may be voted by you in person at the Annual Meeting only if you obtain a valid proxy from the broker, bank, trustee, or nominee that holds your shares giving you the right to vote the shares. Even if you plan to attend the Annual Meeting, we recommend that you also submit your proxy or voting instructions as described below so that your vote will be counted if you later decide not to attend the meeting.

#### How can I vote my shares without attending the Annual Meeting?

Whether you hold shares directly as the shareholder of record or beneficially in street name, you may direct how your shares are voted without attending the Annual Meeting.

Shareholder of Record: Shares Registered in Your Name. If you are a shareholder of record, you may vote by proxy. You can vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested to receive printed proxy materials, you can also vote by mail or telephone pursuant to instructions provided on the proxy card.

Beneficial Owner: Shares Registered in the Name of Broker, Bank, or Other Agent. If your shares are held in "street name," that is, your shares are held in the name of a brokerage firm, bank, or other nominee, in lieu of a proxy card you should receive a voting instruction form from that institution by mail. If you hold shares beneficially in street name, you may also vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested to receive printed proxy materials, you can also vote by telephone or mail by following the voting instruction card provided to you by your broker, bank, trustee, or nominee. Simply complete and mail the voting instruction card to ensure that your vote is counted. The voting instruction form should indicate whether the institution has a process for beneficial holders to vote over the Internet or by telephone.

Shareholders who vote over the Internet or by telephone need not return a proxy card or voting instruction form by mail, but may incur costs, such as usage charges, from telephone companies or Internet service providers.

#### Can I change my vote?

You may change your vote at any time prior to the taking of the vote at the Annual Meeting. If you are the shareholder of record, you may change your vote by (1) granting a new proxy bearing a later date (which automatically revokes the earlier proxy) by using any of the methods described above (and until the applicable deadline for each method), (2) providing a written notice of revocation to our Corporate Secretary at Applied Signal Technology, Inc. 460 West California Avenue, Sunnyvale, California 94086 prior to your shares being voted, or (3) attending the Annual Meeting and voting in person. Attendance at the meeting will not cause your previously granted proxy to be revoked unless you specifically so request.

For shares that you hold beneficially in street name, you may change your vote by submitting new voting instructions to your broker, bank, trustee, or nominee by following the instructions they provided, or, if you have obtained a valid proxy from your broker, bank, trustee, or nominee giving you the right to vote your shares, by attending the Annual Meeting and voting in person.

## What if I receive more than one proxy card or voting instruction form?

If you receive more than one proxy card or voting instruction form because your shares are held in multiple accounts or registered in different names or addresses, please be sure to complete, sign, date, and return *each* proxy card or voting instruction form to ensure that all of your shares will be voted. Only proxy cards and voting instruction forms that have been signed, dated, and timely returned will be counted in the quorum and voted.

If you registered more than one account for online access of shareholder communications, you will receive more than one email notice with voting instructions. Please follow the electronic voting instructions for *each* email notice you receive to ensure that all of your shares will be voted.

#### Who will count the votes and how will my vote(s) be counted?

Votes will be counted by the inspector of elections appointed for the Annual Meeting, who will separately count "FOR" and "WITHHOLD" votes with respect to the election of directors and, with respect to any proposals other than the election of directors, "FOR" and "AGAINST" votes,

abstentions, and broker non-votes. A "broker non-vote" occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that proposal and has not received instructions with respect to that proposal from the beneficial owner, despite voting on at least one other proposal for which it does have discretionary authority or for which it has received instructions. Abstentions will have no effect on the outcome of the election of directors but will be counted as "AGAINST" votes with respect to any proposals other than the election of directors. With respect to the proposal to approve an amendment to the Articles of Incorporation to increase the number of authorized shares of Common Stock, both "broker non-votes" and abstentions would have the same effect as votes "AGAINST" such proposal.

If your shares are held by your broker, bank, or other agent as your nominee (that is, in "street name"), you will need to obtain a proxy form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker, bank, or other agent to vote your shares. If you do not give instructions, your broker, bank, or other agent may vote your shares with respect to "discretionary" items, but not with respect to "non-discretionary" items. Discretionary items are proposals considered routine under the rules of the NASDAQ Global Select Market, such as the vote for directors and ratification of our independent registered public accounting firm.

#### How and when may I submit a shareholder proposal for the 2011 Annual Meeting of Shareholders?

Shareholders may present proper proposals for inclusion in our proxy statement and for consideration at our next Annual Meeting of Shareholders by submitting their proposals in writing to our Corporate Secretary in a timely manner. In the event that a shareholder desires to have a proposal considered for inclusion in our proxy statement for our 2011 Annual Meeting of Shareholders, the proposal must be forwarded in writing to our Corporate Secretary so that it is received no later than October 7, 2010. Any such proposal must comply with the requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended, referred to in this proxy statement as the Exchange Act, and regulations promulgated by the SEC under Rule 14a-8 regarding the inclusion of shareholder proposals in company-sponsored proxy materials. Proposals should be addressed to:

Applied Signal Technology, Inc. Attention: Corporate Secretary 460 West California Avenue Sunnyvale, California 94086

Our bylaws also establish an advance notice procedure for shareholders who wish to present a proposal before an annual meeting of shareholders but do not intend for the proposal to be included in our proxy statement. Our bylaws provide that the only business that may be conducted at an annual meeting is business that is (1) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (2) properly brought before the meeting by or at the direction of the Board of Directors, or (3) if an annual meeting, properly brought before the meeting by a shareholder or (4) if a special meeting, if, and only if, the notice of a special meeting provides for business to be brought before the meeting by shareholders and such business is properly brought before the meeting by a shareholder.

For business to be properly brought before a meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the Secretary of the Company. To be timely, a shareholder proposal to be presented at an annual meeting must be received at our principal executive offices not less than 120 calendar days in advance of the date the our proxy statement was released to shareholders in connection with the previous year's annual meeting of shareholders, except that if no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than 30 calendar days from the date contemplated at the time of the previous year's proxy statement, or in the event of a special meeting, notice by the shareholder to be timely must be received not later than the close of business on the tenth day following the date on which such notice of the date of the meeting was mailed or such public disclosure was made. To be timely for our 2011 annual meeting of shareholders, our Corporate Secretary must receive the written notice, containing the information specified in our bylaws, at our principal executive offices not later than the close of business on October 7, 2010.

Our bylaws provide that no resolution shall be put before the shareholders that is not a proper subject for action by shareholders under California law; that is obstructive, frivolous, dilatory, or repugnant to good taste; that contains any false or misleading statements; that relates to the redress of a personal claim or grievance against the corporation or any other person, or if it is designed to result in a benefit or interest that is not shared by the shareholders at large; that relates to operations that account for less than five percent of the corporation's total assets at the end of its most recent fiscal year, and for less than five percent of its net earnings and gross sales for its most recent fiscal year, and is not otherwise significantly related to the corporation's business; that deals with a matter beyond the corporation's power to effectuate; that deals with a matter relating to conduct of the ordinary business operations of the corporation; or that is counter to or substantially duplicative of a proposal to be submitted by the corporation at the meeting. If the proposal deals with substantially the same subject matter as a prior proposal submitted to shareholders in the corporation's proxy statement and a form of proxy related to any annual or special meeting of shareholders held within the preceding five calendar years, it may be omitted from the agenda of any meeting of shareholders held within three calendar years after the latest such submission, provided that: (i) if the proposal was submitted at only one meeting during such preceding period, it received less than five percent of the total number of votes cast in regard thereto, or (ii) if the proposal was submitted at only two meeting during such preceding period, it received at the time of its latest submission less than ten percent of the total number of votes cast in regard thereof, or (iii) if the proposal was submitted at three or more meetings during such preceding period, it received at the time of its latest submission less than

#### Who will bear the cost of soliciting proxies?

Applied Signal Technology, Inc. will bear the entire cost of the solicitation of proxies for the Annual Meeting, including the preparation, assembly, printing, and distribution of this proxy statement, the proxy card, and any additional solicitation materials furnished to shareholders. Copies of solicitation materials will be furnished to brokerage houses, fiduciaries, and custodians holding shares in their names that are beneficially owned by others so that they may forward the solicitation materials to the beneficial owners. We may reimburse such persons for their reasonable expenses in forwarding solicitation materials to beneficial owners. The original solicitation of proxies may be supplemented by solicitation by personal contact, telephone, facsimile, email, or any other means by our directors, officers, or employees. No additional compensation will be paid to those individuals for any such services.

#### How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in our Quarterly Report on Form 10-Q for the quarter ending April 30, 2010.

## Matters to be Considered at the Annual Meeting

#### Information about our Board of Directors

Applied Signal Technology, Inc. has a classified Board of Directors consisting of four Class I directors (John P. Devine, David D. Elliman, Robert J. Richardson, and William B. Van Vleet III), and three Class II directors (Milton E. Cooper, Marie S. Minton, and John R. Treichler). Mr. John P. Devine, a director since 1995, has been our non-executive Chairman of the Board of Directors since May 1, 2008.

At each annual meeting of shareholders, directors are elected for a term of two years to succeed those directors whose terms expire at the Annual Meeting date and serve until their respective successors are duly elected and qualified. The term of our Class II directors expires at this Annual Meeting to be held in 2010. The term of our Class I directors expires at the 2011 Annual Meeting.

The following table sets forth, for our current directors, including the nominees to be elected as Class II directors at this meeting, information with respect to their ages and background.

Name	Principal Occupation	Age	Director Since
Class I directors:			
John P. Devine	Director	72	1995
David D. Elliman	Director	59	1991
Robert J. Richardson	Director	63	2003
William B. Van Vleet III	Chief Executive Officer	51	2008
Class II directors:			
Milton E. Cooper	Director	71	2004
Marie S. Minton	Director	48	2007
Dr. John R. Treichler	Chief Technology Officer	62	1984

## Nominees for Election for a Two-Year Term Expiring at the 2012 Annual Meeting

#### Milton E. Cooper

Milton E. Cooper has been a director of the Company since March 2004. Mr. Cooper was the President of the Federal Sector of Computer Sciences Corporation from January 1992 through February 2001. Prior to that time, he also served in marketing and general management positions with IBM Corporation, Telex Corporation, and Raytheon Company. Mr. Cooper currently serves as a director of L-1 Identity Solutions, Inc., a provider of biometric recognition technology and services for identification of individuals, and EPlus, Inc., a business selling,

leasing, and managing information technology and other assets.

#### Marie S. Minton

Marie S. Minton has been a director of the Company since August 2007. Ms. Minton is the founder and Managing Director of Transition Finance Strategies, LLC, an investment holding company formed in 2003 that owns and manages small businesses. From 1994 to 2003, Ms. Minton was a Managing Director and the Chief Financial Officer of Global Environment Fund, an international private equity investment management firm. Before joining GEF, Ms. Minton was the Vice President of Finance for Clean Air Capital Markets Corporation, a boutique investment banking firm. From 1986 through 1993, Ms. Minton was an Audit Manager in the Entrepreneurial Services Division of Ernst & Young. She served as a director, member of the Audit and Executive Committees, and Chair of the Compensation Committee of Essex Corporation from 2000 through 2006. Ms. Minton is a Certified Public Accountant and a Chartered Financial Analyst. She is a member of the American Institute of CPAs, the Virginia Society of CPAs, the CFA Institute, and the CFA Society of Washington, D.C. In addition, she teaches the accounting curriculum for level one of the CFA exam for Stalla Review.

#### Dr. John R. Treichler

Dr. John R. Treichler, a co-founder of the Company, has been a director and employee of the Company since its incorporation in 1984. He has served in the position of Senior Scientist since 1984 and as Chief Technology Officer since 1999. Prior to co-founding the Company, he worked at ARGOSystems, Inc. for seven years, most recently serving as a senior scientist in the Strategic Systems Division, and at Stanford University for three years in the Information Systems Laboratory. Prior to working at Stanford University, Dr. Treichler served for four years as an officer in the United States Navy.

## **Directors Continuing in Office until the 2011 Annual Meeting**

#### John P. Devine

John P. Devine has been a director of the Company since May 1995. Mr. Devine served as Deputy Director, National Security Agency (NSA) for Technology and Systems from 1992 to 1995 and as Deputy Director, NSA for Research and Engineering from 1990 to 1992. From 1989 to 1990, Mr. Devine served as NSA Chief of Staff. Mr. Devine has been a consultant to the defense industry since his retirement from the NSA. Mr. Devine served on the boards of EADS N.A. Security Systems and Solutions from 2002 to 2007 and Ericsson Federal Systems from 2001 to 2008. Mr. Devine currently serves on the board of Spirent Federal Systems.

#### David D. Elliman

David D. Elliman has been a director of the Company since 1991. Mr. Elliman is a professional investor. He is a founding partner of Elmrock Partners, which, along with affiliates, specializes in private equity, marketable equity, structured finance, and asset securitization investments. Elmrock Partners was founded in 1982. Mr. Elliman serves on the boards of the New York State Energy Research and Development Authority, The Jackson Laboratory, and a number of private companies and charities.

#### Robert J. Richardson

Robert J. Richardson has been a director of the Company since February 2003. From November 1997 to January 2000, Mr. Richardson was Chairman and Chief Executive Officer of Unitrode Corporation, a publicly traded semiconductor company, which was acquired by Texas Instruments, Inc. in 2000. From June 1992 to November 1997, Mr. Richardson was President of SVG Lithography (formerly Perkin-Elmer) in Connecticut, and then Vice President, New Business Development and Corporate Marketing for Silicon Valley Group. From 1988 to 1992, Mr. Richardson was the President and General Manager for the Santa Cruz Division of Plantronics, Inc., a manufacturer of communications equipment, and from 1985 to 1988, he was Director, Motorola New Enterprises. Mr. Richardson currently serves as director for a number of private technology companies.

#### William B. Van Vleet III

William Van Vleet III was appointed as President, Chief Executive Officer, and a member of the Board of Directors in August 2008, and had been serving as President and Chief Executive Officer since May 1, 2008. Mr. Van Vleet joined the Company in July 2005 as Executive Vice President of the Sensor Signal Processing Group in connection with the Company's acquisition of Dynamics Technology, Inc. and was promoted to Deputy Chief Operating Officer in August 2006 and to Chief Operating Officer in November 2007. Mr. Van Vleet was President and Chief Executive Officer of Dynamics Technology, Inc. from 2002 to July 2005. Prior to that time, Mr. Van Vleet worked at The Boeing Company for 22 years, where he served in a variety of engineering and executive management positions, leading divisions addressing communications and intelligence markets.

## **Proposal One: Election of Class II Directors**

Three individuals are to be elected to serve as Class II directors of the Board of Directors at this 2010 Annual Meeting. Management's nominees for election by the shareholders to those positions are the current Class II members of the Board of Directors, Milton E. Cooper, Marie S. Minton, and Dr. John R. Treichler. If elected, the nominees for election as Class II directors will serve as directors until our Annual Meeting of Shareholders in 2012, and until their successors are elected and qualified.

Each of Mr. Cooper, Ms. Minton, and Dr. Treichler is standing for re-election by the shareholders.

Unless instructed otherwise, the persons named in the accompanying proxy will vote the shares represented by such proxy for the election of the three nominees for Class II director. Each of the three nominees has consented to serve, and the Board does not know of any reason why any of them would be unable to serve. If a nominee becomes unavailable or unable to serve before the Annual Meeting (for example, due to serious illness), the Board can either reduce its size or designate a substitute nominee. If any nominee becomes unavailable for election to the Board of Directors, an event which is not anticipated, the persons named as proxies have full discretion and authority to vote or refrain from voting for any other nominee in accordance with their judgment.

## **Required Vote**

If a quorum is present and voting, the three nominees for Class II director receiving the highest number of votes will be elected as Class I directors. Abstentions and broker non-votes have no effect on the vote.

Recommendation of the Board of Directors

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE NOMINEES FOR CLASS II DIRECTOR NAMED ABOVE. UNLESS AUTHORITY TO DO SO IS WITHHELD, THE PROXY HOLDERS NAMED IN EACH PROXY WILL VOTE THE SHARES REPRESENTED THEREBY FOR THE ELECTION OF THE NOMINEES LISTED ABOVE.

## **Corporate Governance**

#### Independence of the Board of Directors

The Board of Directors determines the independence of directors annually based on a review by the directors and the Nominating and Governance Committee. No director is considered independent unless the Board of Directors has determined that he or she has no material relationship with us, either directly or as a partner, shareholder, or officer of an organization that has a material relationship with us. Material relationships can include commercial, industrial, banking, consulting, legal, accounting, charitable, and familial relationships, among others. The standards relied upon by the Board of Directors in affirmatively determining whether a director is independent are comprised of those objective standards set forth in the NASDAQ rules, which generally provide that an "independent director" means a person other than an executive officer or employee of the company or any other individual having a relationship which, in the opinion of the issuer's board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The following persons shall not be considered independent:

- A director who is, or at any time during the past three years was, employed by Applied Signal Technology
- A director who accepted or who has a family member who accepted any compensation from Applied Signal Technology or its subsidiaries in excess of \$120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than the following:
  - ♦ Compensation for board or board committee service
  - ♦ Compensation paid to a family member who is an employee (other than an executive officer) of the company
  - ♦ Benefits under a tax-qualified retirement plan, or non-discretionary compensation
- A director who is a family member of an individual who is, or at any time during the past three years was, employed by Applied Signal Technology as an executive officer
- A director who is, or has a family member who is, a partner in, or a controlling shareholder or an executive officer of, any organization to which the company made, or from which Applied Signal Technology received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenues for that year, or \$200,000, whichever is more, other than the following:
  - Payments arising solely from investments in the company's securities
  - ♦ Payments under non-discretionary charitable contribution matching programs
- A director who is, or has a family member who is, employed as an executive officer of another entity where at any time during the past three years any of the executive officers serve on the compensation committee of such other entity

• A director who is, or has a family member who is, a current partner of Ernst & Young LLP, or was a partner or employee of Ernst & Young LLP who worked on our audit at any time during any of the past three years

In addition, members of the Audit Committee must (i) meet the criteria for independence set forth in Rule 10A-3(b)(1) under the Securities Act of 1933, as amended (ii) not have participated in the preparation of our financial statements or those of any of our current subsidiaries at any time during the past three years, and (iii) be able to read and understand fundamental financial statements, including a company's balance sheet, income statement, and cash flow statement. Additionally, at least one member of the Audit Committee must have past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background that results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer, or other senior officer with financial oversight responsibilities.

In December 2009, the directors and the Nominating and Governance Committee considered the independence of each of the members of the Board of Directors based upon discussions about the relationships of each of the directors with the Company (and those of their immediate family members). In addition, they discussed other potential conflicts of interest, as well as material provided by management related to transactions, relationships, or arrangements between us and the directors or parties related to the directors. The Nominating and Governance Committee reported its conclusions to the Board of Directors. The Board of Directors then considered each director individually, and determined that none of the directors has had during the last three years (i) any of the relationships listed above or (ii) any other material relationship with us that would compromise his or her independence; provided, however, that as Chief Executive Officer, Mr.Van Vleet, and as Chief Technology Officer, Dr. Treichler, do not meet the definition of independence. The Nominating and Governance Committee also determined that the members of the Audit, Compensation, and Nominating and Governance Committees also meet the applicable independence tests of NASDAQ and the SEC.

The Board of Directors has additionally determined that each of Mr. David D. Elliman, Ms. Marie S. Minton, Mr. Robert J. Richardson, and Mr. Milton E. Cooper is an "audit committee financial expert" as defined in Item 401(h) of Regulation S-K under the Securities Act of 1933, as amended.

#### **Executive Sessions**

Our independent directors meet in regularly scheduled executive sessions at which only independent directors are present. Mr. Devine, as non-executive Chairman of the Board, chairs all executive sessions of the Board of Directors.

## Meetings of the Board of Directors and Committees

During the fiscal year ended October 31, 2009, the Board of Directors held five meetings. All directors attended at least 75% of the aggregate of the number of meetings of the Board of Directors and of the committees of the Board of Directors on which such director served during fiscal year 2009.

#### **Committees of the Board of Directors**

The Board of Directors currently has three regular committees: Audit Committee, Compensation Committee, and Nominating and Governance Committee. Each of these committees operates under a written charter adopted by the Board. Copies of these charters are available on our website at www.appsig.com. The following table provides membership information for fiscal year 2009 for each of the committees of the Board of Directors.

Name	Audit	Compensation	Nominating and Governance
Milton E. Cooper		X*	
John P. Devine		X	X
David D. Elliman	X*	X	
Marie S. Minton	X		X
Robert J. Richardson	X		X*
* Committee Chairperson			

## The Audit Committee

The Audit Committee of the Board of Directors oversees our accounting and financial reporting processes and the audits of our financial statements. For this purpose, the Audit Committee performs several functions:

- Maintains responsibility for the appointment, compensation, retention, and oversight of our independent registered public accounting firm and evaluates the qualifications, performance, and independence of the independent auditor
- Approves in advance the engagement of the independent registered public accounting firm for all audit and non-audit services, and approves the fees and other terms of the engagement
- Reviews, with our independent registered public accounting firm, any significant difficulties, disagreements, or restrictions
  encountered during the course of the audit, and reviews any management letters issued by the independent registered public
  accounting firm
- Reviews the critical accounting policies and all alternative treatments of financial information discussed by the independent registered
  public accounting firm with management, and reviews with management significant judgments made in the preparation of financial
  statements
- Reviews, with management and our independent registered public accounting firm, our financial reporting processes and internal financial controls
- Reviews the annual audited financial statements and recommends to the Board of Directors their inclusion in our annual report
- Reviews the quarterly financial statements and earnings press releases
- Reviews with management its assessment of the effectiveness and adequacy of our internal controls and procedures for financial reporting, and any significant deficiencies in the design or operation of our internal controls, and reviews with the independent registered public accounting firm their report on our internal controls
- Reviews and approves any related party transactions
- Establishes and oversees procedures for the receipt, retention, and treatment of complaints received regarding accounting, internal controls or auditing matters; reviews changes in, or waivers of, our Code of Conduct, and as requested by the Board, reviews and investigates any conduct alleged to be in violation of the Code of Conduct
- Periodically reviews and discusses with the independent registered public accounting firm the matters required to be discussed
  pursuant to applicable accounting standards and any formal written statements received from the registered independent public
  accounting firm

The Audit Committee held twelve meetings during the fiscal year ended October 31, 2009.

#### The Compensation Committee

The Compensation Committee of the Board of Directors:

- Periodically reviews and advises the Board concerning both regional and industry-wide compensation practices and trends in order to
  assess the adequacy and competitiveness of our compensation programs for executive officers and directors relative to comparable
  companies in our industry
- Approves all compensation payable to our executive officers and members of our Board of Directors
- Reviews and approves corporate and personal performance goals and objectives relevant to the compensation of all executive officers, and sets all executive compensation
- Makes recommendations to the Board regarding the establishment and terms of our incentive compensation plans and equity compensation plans, and administers such plans
- Approves grants of options, restricted stock, and other equity awards to all executive officers and directors
- Approves compensation-related matters outside the ordinary course to executive officers and directors, including but not limited to employment contracts, change-in-control provisions, severance arrangements, and material amendments thereto
- Reviews and approves for filing the disclosures in our "Compensation Discussion and Analysis" and any other disclosures regarding executive compensation to be included in our public filings or shareholder reports

The Compensation Committee is responsible for all grants of equity awards. Equity awards to executive officers of Applied Signal Technology are made at meetings of the Compensation Committee, and not by unanimous written consent. All awards approved for grant at a regularly scheduled meeting are granted effective as of the date of the meeting. The Compensation Committee has delegated authority to make equity awards to newly-hired employees, other than to an individual who, at the time of grant, is or is expected to become, an executive officer of Applied Signal Technology, a member of the Board of Directors, or any other person whose transactions in our equity securities are subject to Section 16 of the Securities Exchange Act of 1934 and any other person who reasonably may be expected to become a "covered employee" within the meaning of Section 162(m) of the Internal Revenue Code, to the Chief Executive Officer, pursuant to parameters established by the Compensation Committee concerning total number of shares to be issued.

The Compensation Committee held eight meetings during the fiscal year ended October 31, 2009.

#### The Nominating and Governance Committee

The Nominating and Governance Committee of the Board of Directors:

- Evaluates and recommends candidates for election to our Board of Directors
- Determines criteria for selecting new directors, including desired board skills and attributes, and identifies and actively seeks individuals qualified to become directors
- Considers any nominations of director candidates validly made by shareholders
- Reviews and makes recommendations to the Board of Directors concerning qualifications, appointment, and removal of committee members
- Reviews the Code of Business Conduct and Ethics from time to time and recommends such changes to the Code as the Committee shall deem appropriate
- Reviews our compliance with corporate governance listing requirements established by The NASDAQ Stock Market
- Assists the Board in developing criteria for the evaluation of Board and committee performance
- Assists the Board in the orientation of new directors and in the development of corporate governance-related continuing education for all Board members

The Nominating and Governance Committee held four meetings during the fiscal year ended October 31, 2009.

#### **Director Nominations**

Our bylaws contain provisions that address the process by which a shareholder may nominate an individual to stand for election to the Board of Directors at the Company's Annual Meeting. The Nominating and Governance Committee has adopted a policy regarding director nominations and regarding communications by shareholders with directors, including the process for evaluating director nominees proposed by shareholders. To date, we have not received any recommendations from shareholders requesting that the Nominating and Governance Committee (or any predecessor) consider a candidate for inclusion among the Committee's slate of nominees in our proxy statement.

In evaluating director nominees, the Nominating and Governance Committee considers the following factors:

- The appropriate size of our Board of Directors and its Committees
- The perceived needs of the Board for particular skills, background, and business experience
- The skills, background, reputation, and business experience of nominees compared to the skills, background, reputation, and business experience already possessed by other members of the Board
- The nominees' independence from management
- The applicable regulatory and listing requirements, including independence requirements and legal considerations, such as antitrust compliance
- The benefits of a constructive working relationship among directors
- The desire to balance the considerable benefit of continuity with the periodic injection of the fresh perspective provided by new members

Other than the foregoing, there are no stated minimum criteria for director nominees, and the Nominating and Governance Committee may also consider such other factors as it may deem are in our best interests and the interests of our shareholders. The Nominating and Governance Committee does, however, believe it appropriate for at least one member of the Board to meet the criteria for an "audit committee financial expert," that a majority of the members of the Board meet the definition of "independent director" under NASDAQ rules, and that one or more key members of management participate as members of the Board.

The Nominating and Governance Committee identifies nominees by first evaluating the current members of the Board of Directors willing to continue in service. Current members of the Board with skills and experience that are relevant to the Company's business and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of the Board with that of obtaining a new perspective. If any member of the Board does not wish to continue in service or if the Nominating and Governance Committee or the Board decides not to re-nominate a member for re-election, the Nominating and Governance Committee identifies the desired skills and experience of a new nominee, and discusses with the Board suggestions as to individuals that meet the criteria. In addition, the Committee has in the past engaged third parties to identify, evaluate, or assist in identifying potential nominees.

The Nominating and Governance Committee will evaluate any recommendation for director nominee proposed by a shareholder. In order to be evaluated in connection with the Nominating and Governance Committee's established procedures for evaluating potential director nominees, any recommendation for director nominee submitted by a shareholder must be sent in writing to the Corporate Secretary, 460 West California Avenue, Sunnyvale, California 94086, 120 days prior to the anniversary of the date proxy statements were mailed to shareholders in connection with the prior year's Annual Meeting of Shareholders and must contain the following information:

- The candidate's name, age, contact information, and present principal occupation or employment
- A description of the candidate's qualifications, skills, background, and business experience during, at a minimum, the last five years, including his or her principal occupation and employment and the name and principal business of any corporation or other organization in which the candidate was employed or served as a director

#### **Communication with Directors**

Shareholders who wish to communicate with the Board of Directors may do so by writing to: Applied Signal Technology, Inc., Attention: Board of Directors, 460 West California Avenue, Sunnyvale, California 94086. The Corporate Secretary shall maintain a log of such communications and transmit as soon as practicable such communications to the identified director addressee(s), unless there are safety or security concerns that mitigate against further transmission of the communication or the communication contains commercial matters not related to the shareholder's stock ownership, as determined by the Corporate Secretary in consultation with the Chief Executive Officer and legal counsel. The Board of Directors or individual directors so addressed shall be advised of any communication withheld for any reason as soon as practicable.

## **Director Attendance at Annual Meetings**

We make every effort to schedule our Annual Meeting at a time and date to maximize attendance by directors. We believe that annual meetings provide an opportunity for shareholders to communicate with directors and have adopted a policy requesting that all directors make every effort to attend the Company's Annual Meeting. Historically, more than a majority of the directors have done so; for example, 100% of the directors attended the 2009 Annual Meeting.

## **Committee Charters and Other Corporate Governance Materials**

The Board has adopted a charter for each of the committees described above, as well as a Code of Business Conduct and Ethics that applies to all of our employees, officers, and directors. Links to these materials are available on our website at www.appsig.com. To date, there have not been any waivers by the Company of compliance with the code of ethics by any executive officer or director. Any amendments to, or waivers under, the code of ethics that are required to be disclosed by the rules of the SEC will be disclosed on the Company's website.

#### **Compensation Committee Interlocks and Insider Participation**

None of the members of the Compensation Committee are or have been an officer or employee of Applied Signal Technology. During fiscal year 2009, none of our executive officers served on the compensation committee (or its equivalent) or board of directors of another entity any of whose executive officers served on our Compensation Committee or Board of Directors.

#### **Executive Sessions, Evaluation, and Succession Planning**

Executive sessions of independent directors are held in connection with each regularly scheduled meeting of the Board of Directors and at other times as necessary and are chaired by the non-executive Chairman of the Board. The policy of the Board of Directors is to hold executive sessions without the presence of management, including the chief executive officer and other non-independent members of the Board.

Every year, the Board of Directors conducts an assessment of its performance and at the conclusion of the evaluation process, discusses its results. Each committee of the Board of Directors also conducts an assessment of its performance annually.

The Board of Directors believes that ensuring continuity of leadership is critical to our success. Members of management are invited to make presentations to the Board or committees to provide management insight into items being discussed by the Board or committees and to bring managers with high potential into contact with the Board. The Board of Directors regularly reviews persons considered potential successors to various management positions and reviews management training designed to implement the succession plan.

#### **Compensation of Directors**

The Compensation Committee reviews and recommends to the Board non-employee director compensation. We use a combination of cash and stock-based compensation to attract and retain qualified candidates to serve on our Board of Directors. In setting the compensation of non-employee directors, we consider the significant amount of time that the Board members expend in fulfilling their duties to us as well as the experience level required to serve on the Board. The Compensation Committee annually reviews the compensation and compensation policies for non-employee members of the Board of Directors.

*Cash Compensation*. Directors who are also company employees are not compensated for services provided as a member of the Board of Directors. In May 2008, the Compensation Committee reviewed director compensation, considered industry reports concerning director compensation, including the report of the National Association of Corporate Directors on Director Compensation for 2007–2008, and considered

how best to align the interests of directors with shareholders. As a result, for fiscal year 2009, directors were compensated entirely by annual cash payments, payable quarterly, and equity was eliminated as a portion of director compensation. The amount of cash compensation payable to directors was increased to an amount that both brings the compensation in line with compensation payable at similarly situated companies, and to compensate for the elimination of equity grants as a portion of director compensation. The increase in fees payable to Board members was prorated beginning June 1, 2008, and resulted in the following annual fees, payable quarterly, to the Board and members of each committee of the Board during fiscal 2009.

	Annual Cash Payment, each payable quarterly
All Non-employee Board Members	\$80,000
Audit Committee Chair	\$10,000
Compensation Committee Chair	\$7,500
Corporate Governance and Nominating Committee Chair	\$5,000
Chairman of the Board	\$60,000 in addition to all other fees payable

We also reimburse out-of-pocket travel expenses of non-employee directors not residing in the San Francisco Bay area in accordance with our travel policy.

In June 2009, the Compensation Committee reviewed director compensation, after reviewing information provided by its independent compensation consultant, Compensia, Inc. This information included market trends and peer data concerning director compensation paid by peer companies. After reviewing this data, the Compensation Committee confirmed that compensation payable to our non-employee directors is at approximately the 50th percentile of peer companies. Following this discussion, the Compensation Committee determined to reduce the annual cash compensation paid to directors, and to implement per-meeting fees. Accordingly, the compensation was reduced to \$76,000 per annum plus fees for attendance at each meeting of the Board of Directors of \$1,000 per meeting for in-person attendance at each of the four regularly scheduled meetings of the Board per annum. In addition, the Compensation Committee approved an increase in the fees payable to the chair of the Audit Committee to \$14,000 per annum.

Equity Compensation. Non-employee directors are eligible to participate in the 2001 Stock Option Plan and 2004 Stock Incentive Plan, and employee-directors are able to participate in the 1993 Employee Stock Purchase Plan, 2001 Stock Option Plan, 2004 Stock Incentive Plan, and 401(k) Plan. Options granted to non-employee directors are not intended to qualify as incentive stock options under the Internal Revenue Code. The initial and any annual options granted to non-executive directors vest annually in three equal annual installments on the anniversary date of such grant. A director who ceases to be a director for any reason may exercise the vested portion of his or her options within 12 months following such termination, to the extent not previously exercised. All options granted to non-employee directors under the 2001 Stock Option Plan expire ten years following the date of grant, and under the 2004 Stock Incentive Plan, expire eight years following the date of grant. Options to purchase our common stock and restricted stock granted to our non-employee directors provide that in the event of a change in control of the Company, each outstanding option, and each share of restricted stock, held by a non-employee whose service as a director has not terminated prior to such date shall be vested in full, and in the case of stock options, immediately exercisable and vested in full as of the date ten days prior to the change in control.

As a result of the decision made to eliminate equity as a part of non-employee director compensation as described above, we made no grants of restricted stock or stock options to non-employee directors during fiscal year 2009.

We have adopted the following stock ownership guidelines applicable to non-employee members of the Board of Directors:

All non-employee members of the Board of Directors shall acquire and maintain over time a minimum in value of shares of the Company's Common Stock equal to three times the total annual cash compensation payable to such director

Until such value of shares of the Company's Common Stock equal to three times the total annual cash compensation payable to such director is acquired and maintained, non-employee members of the Board of Directors shall annually purchase such minimum number of shares of Common Stock equal in value to 30% of the total cash compensation payable to such director

The value of the shares held by the Board members shall be determined by the greater of the aggregate purchase price paid for such shares or the current market price determined as of December 31 of each fiscal year

Ownership shall be computed in terms of shares of the Company's common stock owned outright, without taking into account (i) the value of stock options or other securities convertible into shares of the Company's Common Stock, or (ii) unvested shares of restricted stock held

The following table sets forth information concerning the compensation earned during the fiscal year ended October 31, 2009, by each individual who served as a director at any time during the fiscal year.

#### 2009 Director Compensation

Name	Fees Earned or Paid in Cash (\$) <sup>(1)</sup>	Stock Awards (\$) <sup>(2)</sup>	Other Compensation (\$) <sup>(3)</sup>	Total (\$)
Milton E. Cooper	\$87,500	\$17,333	\$1,875	\$106,708
John P. Devine	\$140,000	\$17,333	\$1,875	\$159,208
David D. Elliman	\$90,000	\$17,333	\$1,875	\$109,208
Marie S. Minton	\$80,000	\$24,704	\$2,344	\$107,048
Robert J. Richardson	\$85,000	\$17,333	\$1,875	\$104,208

Dr. John R. Treichler<sup>(4)</sup>

William B. Van Vleet III(4)

(1) For a description of annual non-employee director fees, see the disclosure above under "Cash Compensation."

(2) The amounts shown are the compensation costs recognized in our financial statements for fiscal year 2009 related to awards of restricted stock to our

non-employee directors in fiscal year 2007 and prior years, to the extent we recognized compensation costs in fiscal year 2009 for such awards, excluding

the impact of estimated forfeitures related to service-based vesting conditions. For a discussion of the valuation assumptions used in the calculation of

stock-based compensation, see Note 1 of Notes to Consolidated Financial Statements, "Organization and Summary of Significant Accounting Policies—

Stock-Based Compensation" included in Part IV, Item 15 of our Annual Report on Form 10-K for the year ended October 31, 2009, referred to in this

proxy statement as our 2009 Form 10-K.

(3) The amounts shown represents the dividend payments received during fiscal year 2009, associated with restricted stock awards made in prior fiscal years.

(4) Mr. Van Vleet and Dr. Treichler received no compensation for their service on the Board of Directors. Compensation paid to each of them as

Chief Executive Officer and Chief Technology Officer, respectively, is disclosed in the Summary Compensation Table.

## Proposal Two: Approval of Amendment to the Articles of Incorporation to Increase the Number of Authorized Shares of Common Stock from 20,000,000 to 35,000,000

#### **Background**

Under California law, we may only issue shares of Common Stock to the extent such shares have been authorized for issuance under our Second Amended and Restated Articles of Incorporation. The Second Amended Articles of Incorporation currently authorizes the issuance of up to twenty million (20,000,000) shares of Common Stock. However, as of January 19, 2010, 13,302,602 shares of Common Stock were issued and outstanding and 2,193,811 shares were reserved for issuance under our equity compensation plans, leaving 4,503,587 shares of Common Stock unissued and unreserved. In order to ensure sufficient shares of Common Stock will be available for issuance by us, the Board of Directors has approved, subject to shareholder approval, an amendment to our Articles of Incorporation to increase the number of shares of such Common Stock authorized for issuance from twenty million (20,000,000) to thirty-five million (35,000,000).

#### **Purpose and Effect of the Amendment**

The principal purpose of the proposed amendment to the Articles of Incorporation is to authorize additional shares of Common Stock which will be available in the event the Board of Directors determines that it is necessary or appropriate to permit future stock dividends, to raise additional capital through the sale of equity securities, to acquire another company or its assets, to establish strategic relationships with corporate partners, to provide equity incentives to employees and officers or for other corporate purposes. The availability of additional shares of Common Stock is particularly important in the event that the Board of Directors needs to undertake any of the foregoing actions on an expedited basis and thus to avoid the time and expense of seeking shareholder approval in connection with the contemplated issuance of Common Stock. The Company currently only has approximately 4.5 million shares available for future issuance. Although the Company believes that the number of authorized shares of Common Stock are sufficient for current corporate purposes, should the Company seek to do strategic acquisitions for stock, or to issue shares in connection with additional financing, the Company may not have sufficient authorized, but unissued, shares available to complete the transaction. If the amendment is approved by the shareholders, the Board does not intend to solicit further shareholder approval prior to the issuance of any additional shares of Common Stock, except as may be required by applicable law or the rules of the NASDAQ Global Market.

The increase in authorized Common Stock will not have any immediate effect on the rights of existing shareholders. However, the Board will have the authority to issue authorized Common Stock without requiring future shareholder approval of such issuances, except as may be required by applicable law. To the extent that additional authorized shares are issued in the future, they may decrease the existing shareholders' percentage equity ownership and, depending on the price at which they are issued, could be dilutive to the existing shareholders. The holders of Common Stock have no preemptive rights and the Board of Directors has no plans to grant such rights with respect to any such shares.

The increase in the authorized number of shares of Common Stock and the subsequent issuance of such shares could have the effect of delaying or preventing a change in control of Applied Signal Technology without further action by the shareholders, although the Board of Directors is not currently aware of any attempt to take over or acquire the Company. Shares of authorized and unissued Common Stock could, within the limits imposed by applicable law, be issued in one or more transactions which would make a change in control of Applied Signal Technology more difficult, and therefore less likely. While it may be deemed to have potential anti-takeover effects, the proposed amendment to increase the authorized Common Stock is not prompted by any specific effort or takeover threat currently perceived by management.

Any such issuance of additional stock could have the effect of diluting the earnings per share and book value per share of outstanding shares of Common Stock and such additional shares could be used to dilute the stock ownership or voting rights of a person seeking to obtain control of us.

If the proposed amendment is approved by the shareholders, paragraph one of Article III of our Articles of Incorporation will be amended to read as follows:

"The Corporation is authorized to issue two classes of shares to be designated respectively "Preferred" and "Common." The total number of Preferred Shares authorized is 2,000,000 and the total number of Common shares authorized is 35,000,000. The shares of Preferred Stock and Common Stock are referred to herein collectively as the "capital stock." All shares of each class of capital stock shall be without par value.

The additional shares of Common Stock to be authorized pursuant to the proposed amendment shall be without par value per share and be of the same class of Common Stock as is currently authorized under the Articles of Incorporation. We do not have any current intentions, plans, arrangements, commitments or understandings to issue any shares of our capital stock except in connection with our stock compensation plans.

## **Required Vote**

Approval of this proposal requires the affirmative vote of a majority of the issued and outstanding shares of Common Stock, as well as the presence of a quorum representing a majority of all outstanding shares of our common stock, either in person or by proxy. Abstentions and broker non-votes will be counted as present for purposes of determining if a quorum is present and will have the same effect as a negative vote on this proposal.

#### **Recommendation of the Board of Directors**

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF AMENDMENT TO THE ARTICLES OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 20,000,000 TO 35,000,000.

## Proposal Three: Ratification of Appointment of our Independent Registered Public Accounting Firm

The Audit Committee of the Board of Directors has selected Ernst & Young LLP as our independent registered public accounting firm to audit our consolidated financial statements for the fiscal year ending October 31, 2010. In the event the shareholders fail to ratify the appointment, the Audit Committee will reconsider this appointment. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that

such a change would be in Applied Signal Technology's and our shareholders' best interests.

Ernst & Young LLP has audited our consolidated financial statements annually since the fiscal year ended October 31, 1985. A Representative of Ernst & Young LLP is expected to be present at the Annual Meeting and to be available to respond to appropriate questions.

## **Required Vote**

Approval of this proposal requires the affirmative vote of a majority of the votes cast affirmatively or negatively on the proposal at the Annual Meeting of shareholders, as well as the presence of a quorum representing a majority of all outstanding shares of our common stock, either in person or by proxy. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum but will not have any effect on the outcome of the proposal.

Recommendation of the Board of Directors

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPOINTMENT OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING OCTOBER 31, 2010.

#### **Principal Accountant Fees and Services**

The Audit Committee has recommended Ernst & Young as our independent registered public accounting firm for the fiscal year ending October 31, 2009. The following table sets forth the aggregate fees billed to us for the fiscal years ended October 31, 2009, and 2008, by Ernst & Young LLP.

	Fiscal Year 2009	Fiscal Year 2008
Audit Fees	\$993,000	\$979,000
Audit-related Fees	_	_
Tax Fees	_	_
All Other Fees		
Total	\$993,000 =====	\$979,000 =====

#### **Audit and Audit-related Fees**

Audit fees relate to services rendered in connection with the audit of the Company's annual financial statements, the effectiveness of our internal controls over financial reporting, reviews of our interim financial statements, accounting consultations, and consents included in registration statements on Form S-8. There were no audit-related fees in fiscal year 2009 or 2008.

#### Tax Fees and Other Fees

There were no tax fees billed by Ernst & Young LLP during fiscal year 2009 or 2008, as we have retained another accounting firm to provide tax advice.

During fiscal year 2009, there were no fees billed by Ernst & Young LLP for financial information systems design and implementation or any other services.

The Audit Committee has approved all of the fees above, and has determined that the rendering of all services by Ernst & Young LLP is compatible with maintaining such auditor's independence.

Policy on Audit Committee Pre-approval of Audit and Permissible Non-audit Services of Independent Registered Public Accounting Firm

The Audit Committee's policy is to pre-approve all audit and non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services, and other services. Pre-approval is generally provided for up to

one year and detailed as to the particular service or category of services. The independent auditor and management periodically report to the Audit Committee regarding the extent of the services provided by the independent auditors in accordance with this approval policy.

## **Report of the Audit Committee**

The Audit Committee of the Board is composed entirely of non-management directors. In addition, all of the members of the Audit Committee meet the independence and experience requirements set forth by the SEC and NASDAQ.

The Audit Committee of the Board operates pursuant to a written charter, which may be accessed through the Corporate Governance section of our website, accessible through the Investor Relations page at http://www.appsig.com/investor/investor.htm. The charter describes the committee's purpose, which is to assist the Board in its general oversight of: (1) the quality and integrity of our accounting and reporting practices and controls and our financial statements and reports; (2) our compliance with legal and regulatory requirements; (3) the independent auditors' qualifications and independence; and (4) the performance of our independent auditors.

The Audit Committee reviews and assesses the adequacy of its charter on an annual basis. The members of the Audit Committee meet regularly with management (including the chief executive officer, chief financial officer, and corporate controller) as well as with senior members of our finance group and Ernst & Young LLP, our independent registered public accounting firm. In addition, the committee meets regularly in separate sessions with representatives of Ernst & Young LLP. During fiscal 2009, the Audit Committee meet twelve times and routinely reported its activities to the full Board.

During fiscal 2009, the Audit Committee reviewed and discussed with management, which has primary responsibility for the financial statements, and with our independent auditors, our annual audited financial statements and quarterly financial statements. The committee also reviewed related issues and disclosure items, including our earnings press releases, and performed its regular review of critical accounting policies and the processes by which our chief executive officer and chief financial officer certify the information contained in our quarterly and annual filings.

The Audit Committee discussed with Ernst & Young LLP the matters required to be discussed by Statement on Auditing Standards No. 61 (Codification of Statements on Auditing Standards, AU § 380), as amended, or as required by the SEC or PCAOB. The Audit Committee also received the written disclosures and letter from Ernst & Young LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding Ernst & Young LLP's communications with the committee concerning independence and discussed Ernst & Young LLP's independence and related issues.

As part of its oversight role and in reliance upon its reviews and discussions as outlined above, the Audit Committee reviewed and discussed with management its assessment and report on the effectiveness of the Company's internal control over financial reporting as of October 31, 2009, which was made using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control—Integrated Framework. The Audit Committee also reviewed and discussed with Ernst & Young LLP its attestation report on internal control over financial reporting. This report is included in our Annual Report on Form 10-K for the year ended October 31, 2009 filed with the SEC on January 12, 2010.

In addition, in reliance upon its reviews and discussions as outlined above, the Audit Committee recommended, and the Board of Directors approved, the inclusion of the Company's audited financial statements in its Annual Report on Form 10-K for the fiscal year ended October 31, 2009 for filing with the SEC and presentation to the Company's shareholders. The Audit Committee also recommended that Ernst & Young LLP be re-appointed as our independent auditors for the fiscal year ending October 31, 2010, and that the Board submit this appointment to the Company's shareholders for approval at the Annual Meeting.

#### Audit Committee

David D. Elliman, Chairman Marie S. Minton Robert J. Richardson

## Principal Shareholders and Stock Ownership by Management

The following table sets forth, as of December 31, 2009, certain information with respect to the beneficial ownership of our common stock by (i) each shareholder known by us to be the beneficial owner of more than 5% of our common stock, (ii) each of our directors and director-nominees, (iii) each executive officer named in the Summary Compensation Table found elsewhere in this document, and (iv) all directors and executive officers of Applied Signal Technology as a group.

Beneficial Owner <sup>(1)</sup>	Number of Shares Beneficially Owned <sup>(2)</sup>	Percent <sup>(3)</sup>
Beneficial Owners of in excess of 5% (other than directors and named executive	officers)	
BlackRock, Inc. (4) 40 East 52nd Street New York, New York 10022	1,369,664	10.30%
Vanguard Group <sup>(5)</sup> P.O. Box 2600 Valley Forge, Pennsylvania 19482-2600	660,730	4.97%
Renaissance Technologies LLC <sup>(6)</sup> 800 Third Avenue 33rd Floor New York, New York 10022	740,751	5.57%
Named Executive Officers <sup>(7)</sup>		
William Van Vleet III <sup>(8)</sup>	75,105	*
James E. Doyle <sup>(9)</sup>	83,452	*
Dr. John R. Treichler <sup>(10)</sup>	315,291	2.37%
Renato F. Roscher, Jr. <sup>(11)</sup>	77,737	*
Dr. Michael J. Ready <sup>(12)</sup>	39,878	*
Directors		
Milton E. Cooper <sup>(13)</sup>	35,850	*
John P. Devine <sup>(14)</sup>	48,530	*
David D. Elliman <sup>(15)</sup>	80,185	*
Marie S. Minton <sup>(16)</sup>	7,288	*
Robert J. Richardson <sup>(17)</sup>	41,850	*
Directors and executive officers as a group (14 persons) <sup>(18)</sup>	890,600	6.69%

<sup>\*</sup> Less than 1%

purpose of computing the percentage ownership of any other person.

<sup>(1)</sup> Except as otherwise indicated, the persons named in this table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them, subject to community property laws where applicable and to the information contained in the footnotes to this table.

<sup>(2)</sup> Under the rules of the Securities and Exchange Commission, a person is deemed to be the beneficial owner of shares that can be acquired by such person within 60 days upon the exercise of options.

<sup>(3)</sup> Calculated on the basis of 13,304,150 shares of common stock outstanding as of December 31, 2009, provided that any additional shares of common stock that a shareholder has the right to acquire within 60 days after December 31, 2009, pursuant to grants of stock options or awards

of restricted stock are deemed to be outstanding and beneficially owned by the person holding such options or restricted stock for the purpose of

computing the number of shares beneficially owned and the percentage ownership of such person, but are not deemed to be outstanding for the

- (4) Based on a Schedule 13G filed with the Securities and Exchange Commission on January 8, 2010, by BlackRock, Inc., BlackRock Inc. has sole
- investment discretion and voting authority over these shares.
- (5) Based on a Schedule 13F filed with the Securities and Exchange Commission on November 13, 2009, by The Vanguard Group, Inc. Of these shares.
- Vanguard Fiduciary Trust Co. holds 20,270 shares, over which it has defined investment discretion and sole voting authority. Vanguard Group holds
- 640,460 shares, over which it has sole investment discretion and no voting authority.
- (6) Based on a Schedule 13F Restatement filed with the Securities and Exchange Commission on November 13, 2009, by Renaissance Technologies
- LLC. Renaissance Technologies LLC has sole investment discretion over all such shares, shared voting authority over 664,100 shares and no voting
- authority over 76,651 shares.
- <sup>(7)</sup> The address of the executive officers and directors is c/o Applied Signal Technology, Inc., 460 West California Avenue, Sunnyvale, California 94086.
- (8) Includes 16,000 shares subject to options exercisable by Mr. Van Vleet within sixty days of December 31, 2009. Also includes 41,125 shares of
- restricted stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Van Vleet's employment terminate prior to vesting.
- (9) Includes 46,250 shares subject to options exercisable by Mr. Doyle within sixty days of December 31, 2009. Also includes 12,124 shares of restricted stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Doyle's employment terminate prior to vesting.
- (10) Includes 30,000 shares subject to options exercisable by Dr. Treichler within sixty days of December 31, 2009 and 14,874 shares of restricted
- stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Dr. Treichler's employment terminate prior to vesting. Also includes 25,000 shares held by Robert K. Treichler Trust and 12,735 shares held in the Anne Eckel Treichler Revokable Trust, over which
- Dr. Treichler disclaims beneficial ownership.
- (11) Includes 32,000 shares subject to options exercisable by Mr. Roscher within sixty days of December 31, 2009 and 13,500 shares of restricted stock
- that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Roscher's employment terminate prior to vesting. Also
- included is 6,557 shares owned by his wife, over which Mr. Roscher disclaims beneficial ownership.
- (12) Includes 19,600 shares subject to options exercisable by Dr. Ready within sixty days of December 31, 2009 and 5,750 shares of restricted stock
- that have not yet vested and are subject to repurchase by Applied Signal Technology should Dr. Ready's employment terminate prior to vesting. Also
- included is 199 shares owned by his wife, over which Dr. Ready disclaims beneficial ownership.
- (13) Includes 30,000 shares subject to options exercisable by Mr. Cooper within sixty days of December 31, 2009. Also includes 1,093 shares of restricted
- stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Cooper's service to us terminate prior to vesting.
- (14) Includes 15,000 shares subject to options exercisable by Mr. Devine within sixty days of December 31, 2008. Also includes 1,093 shares of restricted
- stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Devine's service to us terminate prior to vesting.
- (15) Includes 41,280 shares subject to options exercisable by Mr. Elliman within sixty days of December 31, 2009, and 1,093 shares of restricted stock that
- have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Elliman's service to us terminate prior to vesting. Also includes
- 6,666 shares held in Trust u/d Avery Rockefeller and 10,604 shares held by the Bawd Foundation, over which Mr. Elliman disclaims beneficial ownership.

(16) Includes 1,875 shares of restricted stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Ms. Minton's

service to us terminate prior to vesting.

(17) Includes 35,000 shares subject to options exercisable by Mr. Richardson within sixty days of December 31, 2009. Also includes 1,093 shares of restricted

stock that have not yet vested and are subject to repurchase by Applied Signal Technology should Mr. Richardson's service to us terminate prior to vesting.

(18) Includes 284,330 shares subject to options that are currently exercisable or will become exercisable within 60 days after December 31, 2009, beneficially

owned by executive officers and directors, and 224,620 shares of restricted stock that have not yet vested and are subject to repurchase by Applied Signal

Technology should the employee's or director's service terminate prior to vesting.

## Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our directors and certain officers, and persons who own more than ten percent of a registered class our equity securities, to file reports of ownership and changes in ownership on Forms 3, 4, and 5 with the Securities Exchange Commission. The Securities Exchange Commission requires officers, directors, and greater-than-ten-percent beneficial owners to furnish us with copies of all Forms 3, 4, and 5 they file.

We believe that all of our officers, directors, and greater-than-ten-percent beneficial owners complied with all their applicable filing requirements during the fiscal year ended October 31, 2009, except that our officers each filed one late Form 4, associated with their restricted stock awards granted on November 19, 2008. This is based on our review of copies of Forms 3, 4, and 5 we have received and of written representations from certain persons that they were not required to file a Form 5.

#### **Equity Compensation Plan Information**

Applied Signal Technology, Inc. has five compensation plans under which common stock has been issued to officers and other employees, directors, and consultants. These consist of the 1991 Stock Option Plan, 1993 Employee Stock Purchase Plan, 2001 Stock Option Plan, and 2004 Stock Incentive Plan, which have been approved by shareholders, and the 2000 Stock Option Plan (the 2000 Plan), which has not been approved by shareholders. The 1991 Stock Option Plan expired in January 2001, and the Board of Directors voted to terminate the 2000 Plan in November 2007. All remaining shares reserved for issuance under each of these plans expired. The following table sets forth information regarding outstanding options and shares reserved for future issuance under the foregoing plans as of October 31, 2009.

Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants, and rights  (a)	Weighted-average exercise price of outstanding options, warrants, and rights (b)	Number of shares remaining available for future issuance under equity compensation plans (excluding shares reflected in column (a)) (c)
Equity compensation plans approved by shareholders	(1)	(2)	(3)
Equity compensation plans not approved by shareholders <sup>(4)</sup>	438,325	\$18.80	_
Total			

<sup>(1)</sup> Includes 37,780 shares that are reserved and issuable upon exercise of options outstanding under the 1991 Plan, 213,042 shares that are reserved and issuable upon exercise of options outstanding under the 2001 Plan, and 258,000 shares that are reserved and issuable upon exercise of options outstanding under the 2004 Stock Incentive Plan.

<sup>(2)</sup> Includes a weighted-average exercise price for options outstanding under the 1991 Plan of \$7.64, a weighted-average exercise price for options outstanding under the 2001 Plan of \$14.12, and a weighted-average exercise price for options outstanding under the 2004 Stock Incentive Plan of \$27.14.

(3) Includes 53,884 shares that remain available for grant under the 2001 Plan, 557,251 shares that remain available for grant under the 2004 Stock Incentive Plan, and 732,769 shares reserved for future issuance under the 1993 Employee Stock Purchase Plan.

<sup>(4)</sup> Represents shares issuable upon exercise of outstanding stock options as of October 31, 2009. On November 15, 2007, the plan was terminated and there are no longer any shares remaining available for grant under the 2000 Plan.

#### Material Features of the 2000 Plan

Although the 2000 Plan was terminated in November 2007, as of October 31, 2009, options to purchase 438,325 shares of our common stock remained outstanding and not yet exercised under the 2000 Plan. The 2000 Plan provided for the granting of non-qualified stock options to employees and consultants with exercise prices equal to the fair market value of common stock on the date of grant. Options granted prior to August 2004 vest over five years at a rate of 20% on the anniversary date of the grant and in equal monthly installments over the remaining 48 months. Options granted under the 2000 Plan after August 2004 vest at a rate of 20% each year on the anniversary of the date of grant, with full vesting at the end of five years from the date of grant. Options granted under the 2000 Plan generally have a ten-year term.

## **Executive Compensation and Other Information**

#### Information about the Executive Officers

As of October 31, 2009, our executive officers, who were elected by and serve at the discretion of the Board of Directors, were as follows.

Name	Age	Position
William B. Van Vleet III	51	President and Chief Executive Officer
Dr. John R. Treichler	62	Chief Technology Officer
Mark M. Andersson	50	Chief Operating Officer
James E. Doyle	54	Vice President, Finance and Chief Financial Officer
Dr. Michael J. Ready*	56	Chief Marketing Officer, Marketing and Business Development
Renato F. Roscher, Jr.	57	Executive Vice President, Broadband Communication Systems
Dr. Joseph Leonelli	54	Vice President, Intelligence and Electronic Warfare Systems
Dr. John F. Pesaturo, Jr.	55	Vice President, Sensor Systems
Roger W. Anderson	51	Vice President, Network Intelligence

<sup>\*\*</sup>Dr. Ready ceased being an executive officer as of December 3, 2009, and retired from employment with the Company as of February 19, 2010.

William B. Van Vleet III has served as President and CEO of Applied Signal Technology since August 2008. For biographical information concerning Mr. Van Vleet, please see page 9.

**Dr. John R. Treichler**, a co-founder of the Company, has served as Chief Technology Officer of Applied Signal Technology since its incorporation in January 1984. For biographical information concerning Dr. Treichler, please see page 9.

Mark M. Andersson joined the Company in July 2009 as Chief Operating Officer. He joined the Company from the Harris Corporation, where he served as the Vice President of Propriety Programs in the National Programs business unit of Harris Government Communication Systems Division. Mr. Andersson had over 25 years of experience at Harris developing state-of-the-art technology and turnkey system solutions for ground-and space-based applications for multiple customers within the intelligence and law enforcement communities. Over his career, he assumed roles of increasing responsibility in the areas of business development, systems engineering, and program management. Mr. Andersson held multiple leadership positions overseeing strategic planning and operations of lines of business serving the intelligence community with yearly sales ranging from \$50 million to \$300 million.

**James E. Doyle** joined the Company in September 1991 as a Senior Contracts Administrator and was promoted to Department Manager in November 1991. In March 2000, he was elected Vice President of Finance and Chief Financial Officer.

**Dr. Michael J. Ready** joined the Company in May 1986. From 1987 to 1993, Dr. Ready was a manager within the Advanced Techniques Department. In 1995, he was promoted to Corporate Engineer overseeing programs across the corporation, including the Company IR&D programs, and served in that capacity until August 2005, when he was elected Chief Marketing Officer.

**Renato F. Roscher, Jr.** joined the Company in January 1987 as a Senior Engineer. In June 1995, he was promoted to Corporate Engineer and served in that capacity until January 2001, when he was promoted to Deputy General Manager of the Technical Operations Group. In November 2004, he was elected Executive Vice President of the Communications Systems Group, which was renamed and reorganized during 2008 as the Broadband Communications Systems Division.

**Dr. Joseph Leonelli** joined the Company in July 2005 as Vice President of the Homeland Defense Division in connection with the Company's acquisition of Dynamics Technology, Inc. He was selected as the Vice President of the Wireless Communication Systems Division in November 2005, which was renamed and reorganized as the Intelligence and Electronic Systems Division during 2008. Prior to his service at Dynamics Technology and Applied Signal Technology, Inc., Dr. Leonelli held multiple leadership positions at General Dynamics, Veridian Corporation, and the Battelle Memorial Institute.

**Dr. John F. Pesaturo, Jr.** joined the Company in July 2005 as Vice President of the Ocean Systems Division in connection with the Company's acquisition of Dynamics Technology, Inc. During 2008, this division was renamed and reorganized as the Sensor Systems Division. Prior to his service at Dynamics Technology and Applied Signal Technology, Inc., Dr. Pesaturo held multiple leadership positions at Lockheed Federal Systems and Westinghouse's Ocean Division (later Northrop Grumman).

Roger W. Anderson joined Applied Signal Technology on October 27, 2009, as Vice President of Network Intelligence. Mr. Anderson had over 28 years of experience in program and customer relationship management, strategic planning, program development, and systems engineering. Most recently, Mr. Anderson served as Senior Executive Account Manager for the Intelligence Community business area of Harris Government Communications Systems Division, a supplier of enabling technology and custom communications system solutions for intelligence community customers and pursuits. Before joining Harris in 2006, Mr. Anderson was Executive Vice President and General Manager of Mnemonics, Inc., a private defense electronics firm. Mr. Anderson retired as a senior executive from the Central Intelligence Agency in 2002 after 15 years of service.

## **Compensation Discussion and Analysis**

#### **Overview and Compensation Philosophy**

The Compensation Committee of the Board of Directors administers our executive compensation programs. The Compensation Committee is composed exclusively of independent directors and oversees all compensation and benefit programs and actions that affect our executive officers.

Our objective is to grow our business as a leading provider of state-of-the-art intelligence, surveillance, and reconnaissance (ISR) products, systems, and services. To do so, we anticipate the needs of the global security marketplace and invest in research and development to introduce new capabilities. In some cases, our solution is to develop equipment or services that apply emerging technologies. In other cases, our solution is to develop equipment that offers smaller size, lower power consumption, and lower cost than our competitors' products. We are engaged in a very competitive industry, and our success depends upon our ability to attract and retain qualified executives. As a supplier to the United States Government, we require individuals able to obtain and maintain appropriate security clearances to fill our key officer positions, further limiting the available personnel. Our compensation programs for our executive officers are designed to promote recruitment and retention of key employees able to develop and enhance our solutions and to motivate performance critical to our long-term success, while at the same time maximizing shareholder value and encouraging strong operational and financial performance.

The Compensation Committee administers the compensation programs for our executive officers considering this competitive environment, but also believes that the compensation paid to our executive officers should be dependent upon our financial performance and the value that we create for our shareholders. As part of this philosophy, the Compensation Committee believes that successfully accomplishing business goals should result in rewarding individual achievement, and that failure to achieve established objectives should negatively affect executives' pay. Accordingly, variable compensation programs comprise a portion of the total compensation to our executive officers. Although the Compensation Committee has, from year to year, continued to increase the percentage of executive officer pay that is dependent on achievement of established business goals, the Compensation Committee weighs the accounting implications of increasing the variable portion of executive compensation, given our position as a supplier to the United States Government. Significant increases in the variable portion of executive compensation in any particular fiscal year may not be fully recoverable in our rates charged to the United States Government, and accordingly may have an adverse impact on our results of operations. The compensation programs for our executive officers contain a greater degree of pay at risk than the compensation programs of our other employees. The specific objectives of our executive compensation program include the following:

- Attract, retain, and motivate highly qualified, high performing executives to lead our continued growth and success by providing fair and competitive pay relative to comparably sized organizations in order to be competitive in our industry
- Reward performance by emphasizing variable compensation that is dependent upon the executive's achievements and our performance
- Align the interests of executives and shareholders through equity-based compensation awards

## Compensation Process, Peer Group Selection, and Benchmarking

Compensation Process. As described above under "Corporate Governance, Committees of the Board of Directors, the Compensation Committee, pursuant to its charter, has responsibility for, among other functions: (i) reviewing and approving corporate goals and objectives applicable to the compensation of our Chief Executive Officer and evaluating the performance of our Chief Executive Officer in light of these corporate goals and objectives; (ii) reviewing and approving the compensation of other executive officers; (iii) reviewing and approving our equity incentive plans and awards made under these plans; (iv) reviewing and approving other incentive compensation awarded to our executive officers; and (v) determining and approving the total compensation for each of our executive officers based on an evaluation of his performance.

The Chairman of our Compensation Committee, together with our Chief Executive Officer, sets the agenda for meetings of the Compensation Committee. Our Vice President of Human Resources assists the Compensation Committee by compiling information as requested, and attends some of the meetings. The Committee also has the sole authority to select and/or retain outside counsel, compensation and benefits consultants, or any other consultants to provide it with advice and assistance in connection with the execution of its responsibilities, and outside counsel usually attends most meetings. During fiscal year 2009, the Committee retained Compensia, Inc. to assist it in the evaluation of our executive compensation programs for fiscal 2010.

Role of Management. Following the end of each fiscal year, our Chief Executive Officer evaluates executive officer performance for the prior fiscal year, other than his own performance, and discusses the results of such evaluations with the Compensation Committee. The Chief Executive Officer assesses each executive officer's performance for the fiscal year based upon subjective factors concerning such officer's individual business goals and objectives, and the contributions made by the executive officer to our overall results. These evaluations include an assessment of the level of responsibility of each executive officer and contribution by each executive officer to the success of the Company during the fiscal year. The Chief Executive Officer then makes specific recommendations to the Compensation Committee for adjustments of base salary, target bonus, and equity awards, if appropriate, as part of the compensation packages for each executive officer, other than himself, for the next fiscal year.

The Compensation Committee reviews and assesses the performance of the Chief Executive Officer and determines all compensation for all executive officers, considering the recommendations from the Chief Executive Officer. The Compensation Committee discusses the recommendations of the Chief Executive Officer in executive session without any other members of management present, and may modify the recommendations when approving final compensation packages.

Management also periodically provides recommendations to the Compensation Committee regarding benefit plan design and strategies, including recommendations on the design and implementation of our bonus plans and our equity incentive plans. The financial goals and criteria underlying our Annual Incentive Plan are determined by reference to our annual operating plan, which is proposed by management and approved by the Board of Directors.

Independent Compensation Consultants. Management has historically obtained certain survey information from Radford Consulting, a division of Aon Corporation, an independent consulting firm ("Radford") or from Buck Consulting, another independent compensation consulting firm, concerning executive compensation at peer group companies and has annually presented this information to the Compensation Committee. The Compensation Committee has not historically retained independent compensation consultants, nor relied substantially on information provided by independent compensation consultants when determining executive officer compensation other than this survey data purchased from Radford, or previously from Buck Consulting. Beginning in fiscal 2009, the Compensation Committee retained Compensia, Inc., an outside compensation consulting firm, to review our compensation programs for non-employee directors and for executive officers in connection with compensation matters for fiscal 2010. In 2009, Compensia conducted the following projects at the request of the Compensation Committee:

- the development of executive compensation guiding principles;
- a review of and recommendations related to our executive officers' base salaries, cash bonuses, and long-term incentive compensation levels and plan structures for 2010;
- a review of and recommendations related to our 2010 Board of Director's compensation program; and
- a review of and recommendations related to stock ownership guidelines, which the Compensation Committee elected to defer pending additional review.

The Committee met in November 2008 to discuss executive compensation matters for fiscal 2009. The Compensation Committee reviewed survey data received from Radford Consulting, a division of Aon Corporation ("Radford Consulting") concerning compensation payable to executive officers at comparable levels at companies with comparable annual revenue. The Compensation Committee was provided with data from the Radford Executive Survey, a survey compiled by Radford Consulting from information provided by more than 700 participating

companies representing a wide range of technologies. Survey results for 80 positions are published quarterly, sorted by revenue size of the company. Data is provided concerning base salary, bonus/incentives, total cash compensation, stock options and restricted stock, and total direct compensation, by position, and by each position for the average compensation paid, and compensation paid at the 90th, 75th, 60th, 50th, 25th, and 10th percentiles within the survey. Data presentation for all six default percentiles requires a sample of ten or more incumbents. Percentiles reflect the value for the calculated result found at a specific point in the sorted array of responses from high to low. Total direct compensation is the value received in cash plus ongoing stock options granted in the previous twelve months, using the net present value or Black-Scholes method, and where it includes the value of restricted stock, the fair market value of ongoing restricted stock awards.

The Radford Executive Survey is a rolling database, refreshed quarterly. Throughout this compensation process, neither management nor any member of the Compensation committee communicated directly with Radford, and we purchased the survey directly from Radford without modification or tailoring for specific circumstances of the Company.

Peer Group Selection and Benchmarking. Prior to 2009, the Compensation Committee did not rely on specific peer group data to set executive compensation levels, although the Compensation Committee has always sought to set the base salary and total compensation of our executive officers in line with compensation payable to executive officers at companies with which we are competitive for personnel. For fiscal year 2009, the Compensation Committee relied exclusively on the 2008 Radford Executive Survey for high technology companies as our primary source of market data and as a comparative framework to define specific peer companies and data sources to be used in the assessment of executive compensation. The Radford Executive Survey is a rolling database, refreshed quarterly that provides access to compensation survey data, tools and resources. For our Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Chief Technology Officer, and Chief Marketing Officer, the Compensation Committee reviewed the Radford Executive Survey data for companies with revenue of \$50 million to \$199.9 million. For the Executive Vice President of our largest revenue generating division, the Compensation Committee reviewed Radford Executive Survey data for companies with revenue of up to \$100 million, which is a closer approximation of the total revenues for which he has responsibility. For the other Vice Presidents, the Compensation Committee reviewed Radford Executive Survey data for companies with revenue of up to \$50 million to appropriately match their division revenue. The survey database includes information provided by over 1,000 participants, the specific companies included in each of these data sets were not known to us.

In 2009, in connection with its review of fiscal year 2010 compensation, the Compensation Committee worked with Compensia to specify peer groups against which executive compensation levels were evaluated. Two peer groups were developed:

- Technology peers: selected companies with revenues generally between 0.5x to 3.0x the Company's current level in the Networking Equipment, Software, or Aerospace/Defense industry segments; and
- Defense industry peers: selected companies with revenues generally between 0.5x to 3.0x the Company's current level that sell primarily to the U.S. Government and/or sell products used primarily for military application; focused on companies whose primary source of revenue emphasized government contracts or whose revenue was derived primarily from a single/select few clients and/or whose revenue was primarily domestic.

#### These peer companies comprised:

American Science & Engineering	ARGON ST	Axsys Technologies
BigBand Networks	Cogent	Cohu
Comtech Telecomm	Ducommun	EMS Technologies
GeoEye	Globecomm Systems	Harmonic
Herley Industries	Integral Systems	iPass
Kratos Defense & Security Solutions	Ladish	Mercury Computer Systems
MRV Communications	NCI	ShoreTel
Sonus Networks	Starent Networks	TEKELEC
ViaSat	Zhone Technologies	

Data from the 2009 Radford Executive Survey was also utilized. While specific company participants were not known to us, we selected companies from their database with the following characteristics: revenues between \$100 million and \$400 million and from either the Aerospace/Defense Electronics, Computer/Peripherals, Network Products/Services, Technical/Professional Services, or Telecommunications Products/Services industry groups (as defined by Radford).

The Compensation Committee sought to set the base salary of our executive officers close to the 75th percentile as indicated in the Radford Executive Survey, with deviations from such percentages being made to reflect differences in experience or level of responsibility of each executive officer. Compensation positioning is reviewed in order to assess the pay levels and pay mix of the executive compensation program, while actual executive compensation may be above or below the stated philosophy based upon experience, scope of position, and individual performance. The Committee also set total cash compensation as close to the 75th percentile as possible, noting that typically, equity compensation awarded by us to our executive officers is lower than many peer companies.

#### **Elements of Compensation and How Each Element is Chosen**

In order to achieve our compensation objectives, our executive compensation is based upon the following principles:

- Promote the recruitment and retention of key employees and reward individual achievement
- Create value for our shareholders by designating a portion of compensation as dependent on our financial performance, while concurrently fostering cooperation among divisions, and cross-selling of multiple capabilities
- Place an emphasis on performance-based variable pay and foster a culture of pay-for-performance within the company

For fiscal year 2009, each executive officer's compensation consisted of three elements: (i) base salary, (ii) cash bonus based upon participation in our Annual Incentive Plan, tied to our attainment of pre-established objectives, and (iii) long-term stock-based incentive awards in the form of restricted stock designed to align the interests between our executive officers and our shareholders. In setting compensation, the Compensation Committee considers:

- Cash versus non-cash compensation, and the appropriate balance between each
- Amount of compensation paid for the prior year, and the general level of increases or decreases to be made thereto
- Performance and competitive practices

The Compensation Committee will review our prior year operating and financial performance as well as peer group pay practices and any emerging compensation trends when determining executive compensation programs.

In determining the size of total cash compensation and equity awards made to our Chief Executive Officer and our other executive officers, the Committee is mindful of internal pay equity considerations, but also considers the ability of each executive officer to impact Company performance. The Compensation Committee is also aware of the benefits of fostering cooperation among our divisions, and considers the relative size of each executive officer compensation package with that in mind.

The Committee reviewed detailed historical information concerning the compensation and benefits previously paid to executive officers, and confirmed its philosophy of continuing to provide that a greater portion of executive compensation be comprised of incentive compensation than in previous fiscal years. The Committee considered the impact of Company Fiscal Year 2008 financial and operating performance, the Company performance objectives to be established for Fiscal Year 2009, and how each element of officer compensation could incentivize officers to achieve such Company performance during Fiscal Year 2009. The Committee noted that Fiscal Year 2008 was a year of substantial change for the Company, including significant management changes and noted the performance of the executive officers in light of all of such changes, including the streamlining of the organization and the reduction of operating expenses.

*Base Salaries*. Our base salaries are set at levels that are designed to aid in the recruitment and retention of key employees with needed skills. Base salary is not dependant on Company performance, and is based upon the individual's level of responsibility, experience, individual performance, and contribution to our overall success.

Base salaries of the executive officers are reviewed annually at the conclusion of the prior fiscal year, and are generally effective from the beginning of the fiscal year. For fiscal Year 2009, the Compensation Committee targeted base salaries of executive officers at the 75th percentile of the Radford Executive Survey, on a job-by-job basis with individual variations explained by differences in experience, skills, and sustained performance, as the Compensation Committee has determined that this is the level at which it believes that salaries should be set in order to attract and retain qualified individuals able to fill our needs, particularly given the need to retain experienced executives able to obtain and hold the requisite security clearances needed. The Compensation Committee also reviews individual factors, including the role, scope of responsibility, leadership, and performance, including the individual's contribution to company performance in the prior fiscal year.

Annual Incentive Compensation. Our annual incentive pay, in the form of awards under our Annual Incentive Plan, is designed to motivate the executive officers to attain vital short-term Company goals. Our annual incentive compensation is designed to reward individual achievement, while at the same time creating value for our shareholders by designating a portion of compensation as dependent on our financial performance. Executive officers are eligible for incentive compensation annually under our non-shareholder-approved Annual Incentive Plan. Awards under the Annual Incentive Plan are determined based upon Company performance against pre-established financial targets.

The amount of the total target bonus payable to each executive officer varies based upon the position and responsibilities of the employee and ability to impact overall Company performance, and is set at the beginning of the year as a percentage of such employee's base annual salary. The intent of the new targets is to provide a competitive level of compensation when the individual and the Company achieve performance objectives approved by the Compensation Committee. For fiscal year 2009, the Compensation Committee again placed a higher percentage of total cash compensation payable to each executive officer at risk and payable only upon achievement of Company performance. The Compensation Committee had previously determined that the more senior the officer, the greater responsibility for overall Company performance, and the greater the ability to impact Company performance. Accordingly, the percentage of base salary representing target bonus awards is higher for our Chief Executive Officer than for our other executive officers.

The target bonuses were established as a percentage of base salary, and for each of our named executive officers for fiscal year 2009 were as follows.

Employee	Target Award
William B. Van Vleet III	35% of base salary
James E. Doyle	30% of base salary
Dr. John R. Treichler	30% of base salary
Dr. Michael J. Ready	25% of base salary
Renato F. Roscher, Jr.	30% of base salary

These target bonuses represented an increase in the size of the targeted bonuses payable to executive officers from those set for fiscal year 2008 under the Annual Incentive Plan, in order to increase the percentage of total compensation that is dependent on achievement of established business goals, as well as to reward management for its performance and to continue to incent high performance.

For fiscal year 2009, performance metrics under the Annual Incentive Plan applicable to our Chief Executive Officer and Chief Financial Officer were tied to Company performance only, without individual performance requirements, given the need for these executive officers to work together and across groups and divisions in order to achieve the performance growth expected. The performance objectives applicable to our Chief Technology Officer included individual performance objectives, given his importance to our continued success with specific customers. Performance targets applicable to our division leaders, by contrast, included division financial metrics in addition to corporate financial metrics, in order to incentivize such officers to meet operating income targets set by the Board of Directors. The Compensation Committee believed that by keeping a portion of the annual performance compensation dependent upon achievement of Company targets, the Annual Incentive Plan aids in fostering cooperation among divisions, and cross-selling of multiple capabilities, while at the same time, individual division financial metrics focused the attention of officers with division responsibilities on achievement of the division goals necessary to meet total Company goals and objectives.

The Company financial goals under the Annual Incentive Plan for fiscal year 2009 were revenue and profitability targets. The minimum threshold for meeting a Company financial target was 90% attainment of the applicable financial target. At the minimum threshold, no bonus was payable for achievement of that metric. The bonus payable increased linearly from 0% at 90% achievement of the financial targets to 100% at 100% achievement of the financial targets. Maximum performance was lowered to 110% achievement of the financial targets, at which point the bonus payable was 150% of the target bonus. For those executive officers with individual targets, the targets included division revenue and division profit, and in one case, Company bookings. The Company performance targets for fiscal year 2009 were:

#### **Company Revenue Targets**

0%	50%	75%	100%	125%	150%
\$184.5 million	\$195 million	\$200 million	\$205 million	\$215 million	\$225 million

#### **Company EBIT Targets**

0%	50%	75%	100%	125%	150%
\$18.45 million	\$19.5 million	\$20.0 million	\$20.5 million	\$21.5 million	\$22.5 million

#### \*\* Achievement in between such threshold levels to be determined linearly

For our Chief Executive Officer, Chief Financial Officer, and our Chief Operating Officer, who joined us mid-year, performance goals were weighted 50% for achievement of revenue targets and 50% for achievement of Company-adjusted earnings before interest and taxes. For this purpose, earnings before interest and taxes excludes the impact of stock-based compensation expense recognized by the Company during the year. For our Chief Technology Officer, achievement was weighted 75% for achievement of Company financial targets and 25% for achievement of personal objectives. The personal objectives are subjective objectives relating to effective leadership determined and evaluated by the Chief Executive Officer regarding expansion of our various customer relationships. For three of our divisional officers, the targets were weighted 50% for achievement of Company financial targets and 50% for achievement of division financial targets; and for one officer, the weighting was 100% achievement of Company bookings. The division financial targets were based on revenue and program profit, with an equal weighting between the two metrics. We use program profit as a measure of profitability because we are unable to calculate discrete financial information, including earnings before interest and taxes, at the division level. The division targets are based upon the same operating plan upon which the Company targets were derived. For fiscal year 2010, none of our executive officers were subject to factors based upon achievement of Company bookings.

These performance targets are set at levels that represent challenging performance goals linked to achievement of the Company's operating plan. This "pay for performance" philosophy is a key aspect of the Compensation Committee's philosophy, designed to reward achievement of the Company's operating plan and provide incentives for exceeding the plan. For purposes of calculating payments under the Annual Incentive Plan, in fiscal year 2009, we achieved 97.74% of the target Company revenue, and exceeded the maximum threshold of 110% of target Company adjusted earnings before interest and taxes. We calculate adjusted earnings before interest and taxes by excluding stock-based compensation expense accrued during the year. Revenue targets were based upon revenue from the existing operations, and any revenue achieved during fiscal year 2009 from acquired businesses were excluded from the targets for purposes of calculating achievement under the Annual Incentive Plan. Achievement of division revenue ranged from 72.88% to 102.78%, and of division profit from 61.87% to 102.35%; accordingly, total bonuses paid to executive officers under the Annual Incentive Plan for fiscal year 2009 ranged from approximately 57% to 118%. The variability in bonus awards represented the variability in achievement of division financial targets; those officers, including our Chief Executive Officer, who were evaluated solely on achievement of Company financial targets received bonuses representing approximately 114% of the target bonus award.

For our Chief Executive Officer, Chief Financial Officer, and our Chief Operating Officer, who joined us mid-year, performance goals were weighted 50% for achievement of revenue targets and 50% for achieved of Company-adjusted earnings before interest and taxes. For our Chief Technology Officer, achievement was weighted 75% for achievement of Company financial targets and 25% for achievement of personal objectives. For three of our divisional officers, the targets were weighted 50% for achievement of Company financial targets and 50% for achievement of division financial targets; and for one officer, the weighting was 100% achievement of Company bookings.

For purposes of calculating payments under the Annual Incentive Plan, in fiscal year 2009, we achieved 97.74% of the target Company revenue, and exceeded the maximum threshold of 110% of target Company adjusted earnings before interest and taxes. Achievement of division revenue ranged from 72.88% to 102.78%, and of division profit from 61.87% to 102.35%; accordingly, total bonuses paid to executive officers under the Annual Incentive Plan for fiscal year 2009 ranged from approximately 57% to 118%. The variability in bonus awards represented the variability in achievement of division financial targets; those officers, including our Chief Executive Officer, who were evaluated solely on achievement of Company financial targets received bonuses representing approximately 114% of the target bonus award.

#### **Equity Compensation Awards**

Equity compensation has traditionally been an important element of our compensation programs company-wide. Because the value of the equity awards will increase only when shareholder value increases, the grant of such equity awards provides long-term incentives to our executive officers. These awards not only serve to align the executives' interests with those of the shareholders over an extended period of time, but because they also generally are subject to vesting in connection with continued service to us over a specified period of time, these awards serve as an additional retention mechanism. The Compensation Committee believes that both of these elements are important factors in executive compensation. All equity awards to our executive officers, currently and for the past several fiscal years, are made at regularly scheduled meetings of the Compensation Committee, and not by written consent.

The Compensation Committee believes that we must offer a competitive equity incentive program if we are to continue to successfully attract and retain the best possible candidates for positions of responsibility within the Company. Employees with a stake in our future become highly motivated to achieve long-term growth and increase shareholder value. For fiscal year 2009, the Compensation Committee continued to make an annual retention grant comprised of an award of restricted stock rather than a stock option grant. Restricted stock awards were introduced as the equity component of our executive compensation program during fiscal year 2006, and continue to be the only form of equity compensation awarded to our executive officers and non-officer employees. The Compensation Committee believes that the award of restricted stock provides greater retentive value than stock options, as there is value in the restricted stock grant even if the price of our common stock does not increase. None of our equity awards have been subject to performance-based vesting. Our executives generally receive such annual equity awards in connection with their performance review, and awards were granted in December 2009, following a review of fiscal year 2009 performance. Each award vests in equal annual installments over four years from the date of grant. Dividends are payable on the awards during the vesting

period.

In determining the number of shares to be awarded to each executive officer, the Compensation Committee considers factors such as the individual performance of the executive officer and the anticipated future contribution of that officer to the attainment of our long-term strategic performance goals. The Compensation Committee reviews the awards together with its determination of annual base salary and target incentive compensation, and strives to keep total compensation at the 50th percentile based upon the survey data received from Radford as described above; accordingly, the Compensation Committee evaluates the amount of the equity compensation component of executive compensation in the overall compensation provided to the executives, but did not target a specific value for each particular grant. The grants awarded to executive officers during fiscal 2009 were not based on or tied to achievement of specific, past objectives, but were reflective of overall performance and were intended to provide longer-term incentives and alignment with the interests of stockholders.

In approving equity awards to executive officers for fiscal year 2009, the Compensation Committee considered each individual's experience, the scope of such individual's responsibilities, his performance in the applicable role, and his expected future contribution to our goals and shareholder value. When making awards, the Compensation Committee also notes the percentage of total equity awards made to Company employees represented by awards to executive officers. For fiscal year 2009, we granted equity awards of restricted stock representing an aggregate of 71,300 shares of which 38,500 shares, or 54%, represented awards to executive officers. The Compensation Committee believes that executive officers have a greater ability to impact total Company performance, and accordingly expects to continue to award a greater proportion of our total equity awards each year to our executive officers.

## **Market Timing of Equity Awards and Trading Windows**

The Compensation Committee does not engage in any "market timing" of equity awards made to the executive officers or other award recipients. As discussed earlier, annual equity awards granted to existing executive officers are made in connection with an annual review process that occurs at a regularly scheduled meeting of the Compensation Committee, the date of which is set at the beginning of the fiscal year. Accordingly, there is no established practice of timing our awards in advance of the release of favorable financial results or adjusting the award date in connection with the release of unfavorable financial developments affecting our business. Equity awards for newly hired employees, including newly hired executive officers, are normally made on the first day of the first fiscal quarter subsequent to the employee's actual commencement of employment. Under our current practice, equity awards for all officers and directors are made by the Compensation Committee and equity awards for other eligible individuals are made by the Chief Executive Officer. It is our intent that all stock option grants, whether made by the Compensation Committee or the Chief Executive Officer, have an exercise price per share equal to the closing selling price per share on the grant date.

It is our policy that officers and directors may neither purchase or sell options of our common stock nor engage in short sales or margin trading with respect to our common stock. Additionally, they must trade within certain periods that are approved by us. Specifically, officers and certain other designated employees must comply with the following requirements:

- Refrain entirely from trading in "puts" and "calls" (publicly traded options to sell or buy stock) straddles, equity swaps, or other derivative securities that are directly linked to our stock
- Do not engage in trading our securities outside of "window periods" (such period generally begins on the second day following the date of release of the quarterly or annual statements of sales and earnings and ends on the first day of the last month of our quarter)

#### **Stock Ownership Guidelines**

At present, we do not have any equity or security ownership requirements for our executive officers.

## **Change in Control and Severance Agreements**

We have no separate change in control or severance arrangements with any of our executive officers. However, we have entered into an Executive Retention and Severance Agreement with each of our executive officers as described under "Executive Employment Agreements" below. The potential payments that each of the named executive officers would have received if a change in control or termination of employment would have occurred on November 1, 2009, are set forth under the section titled "Potential Payments upon Termination or Change in Control" below. These agreements provide that our executive officers will receive compensation and benefits if they lose their jobs under certain circumstances, including in connection with a change in our control. The Compensation Committee initially adopted, and has maintained, these agreements because the Compensation Committee believes that such arrangements protect the interests of our employees, particularly our senior employees, when a potential change of control could affect his or her job security. In addition, since the agreements mitigate any concern our executive officers may have in connection with a termination of their employment by us, or the loss of employment as a result of a change in our control, they promote the interests of shareholders by assuring that management focuses on evaluating opportunities that are in our best interests, without concentrating on individual personal interests. These agreements also help ensure that our management stays committed to furthering our interests, even if we were to consider a transaction that resulted in a change of our control. This allows our executive officers to focus on corporate transactions that are in the best interests of our shareholders without undue concern over whether a transaction may jeopardize the

executive's own employment. The Compensation Committee believes that this plan provides benefits that are typical among comparable companies.

The plan provides for continuation of monthly payments and benefits as a result of a termination of employment by us without cause or by the employee for good reason during the one year following a change in control. The plan also provides for continuation of monthly payments and benefits as a result of termination of employment by us without cause or by the employee for good reason in the absence of a change in our control. The payments consist of a multiple of base salary and annual bonus; in addition, under the Annual Incentive Plan, any bonus earned through the date of termination is payable at the time that bonuses are paid to all other executive officers for such fiscal year. Under the Executive Retention and Severance Plan, the multiple for our Chief Executive Officer is two times annual base salary and bonus, and for all other executive officers is one times annual base salary and bonus.

#### Other Benefits and Perquisites

We provide other customary benefits that are comprehensive and apply uniformly to all of our employees, including our executive officers, including comprehensive medical, dental, life, and disability coverage. The purpose of this element of compensation is to provide assurance of financial support in the event of illness or injury, encourage retirement savings, and encourage additional equity ownership by our employees. Our executive officers are able to participate in the Applied Signal Technology, Inc. 401(k) Plan that featured a matching contribution up to a maximum of six percent of \$235,000 per employee, per annum at the rate of \$0.75 per \$1.00 contributed by the employee.

It is not our practice to provide our executive officers with any meaningful perquisites, other than the benefits described above.

#### **Deferred Compensation Programs**

We do not maintain any non-qualified deferred compensation programs for our executive officers or any supplemental executive retirement plans. We believe that the equity award component of each executive officer's total direct compensation should serve as a major source of wealth creation, including the accumulation of substantial resources to fund the executive officer's retirement years.

#### **Tax and Regulatory Considerations**

When approving the executive compensation programs, the Compensation Committee considers compliance with the rules enacted by federal, state, and local authorities applicable to compensation decisions. The specific areas of regulation that impact our compensation programs include:

• Section 162(m) of the Internal Revenue Code and related Treasury Department regulations, which restrict deductibility of executive compensation paid to our Chief Executive Officer and each of our other most highly compensated executive officers holding office at the end of any year to the extent such compensation exceeds \$1,000,000 for any of such officers in any year and does not qualify for an exception under the statute or regulations. Income from options granted under our shareholder-approved stock option plan would generally qualify for an exemption from these restrictions so long as the options are granted by a committee whose members are "outside directors" (as defined by Section 162(m)) and have an exercise price no less than the fair market value of the shares on the date of grant. We expect that the Compensation Committee will continue to be comprised solely of outside directors, and that any equity awards granted to our executive officers will be approved by the Compensation Committee. The Compensation Committee does not believe that in general other components of our compensation will be likely to exceed \$1,000,000 for any executive officer in the foreseeable future, and therefore concluded that no further action with respect to qualifying such compensation for deductibility was necessary at this time. In the future, the Compensation Committee will continue to evaluate the advisability of qualifying its executive compensation for deductibility of such compensation. The Committee's policy is to qualify its executive compensation for deductibility under applicable tax laws as practicable.

However, compensation that is deemed to be "performance based" under Section 162(m) is generally excluded from this limit. To enable compensation in connection with stock options, stock appreciation rights, certain restricted stock and restricted stock unit awards, performance share and performance unit awards, and certain other stock-based or cash-based awards granted under the 2004 Plan to qualify as "performance based" within the meaning of Section 162(m), the shareholders approved certain material terms of the 2004 Plan. While we believe that compensation in connection with such awards under the 2004 Plan generally will be deductible by us for federal income tax purposes, under certain circumstances, such as a change in our control, compensation paid in settlement of certain awards may not qualify as "performance based."

Section 409A of the Internal Revenue Code, which covers deferred compensation. We are committed to ensuring our programs are designed to comply with Section 409A, and the Compensation Committee reviewed and approved amendments to our Executive Retention and Severance Plan, as well as our 2004 Stock Incentive Plan, during fiscal year 2008 to ensure compliance with these regulations.

## **Report of the Compensation Committee**

We, the Compensation Committee of the Board of Directors of Applied Signal Technology, Inc., have reviewed and discussed the Compensation Discussion and Analysis contained in this proxy statement with management. Based on such review and discussion, we have recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement and in Applied Signal Technology's Annual Report on Form 10-K for the fiscal year ended October 31, 2009.

#### **Compensation Committee**

Milton E. Cooper, Chairman John P. Devine David D. Elliman

## **Summary Compensation Table**

The following table sets forth information concerning the compensation earned during the fiscal years ended October 31, 2009, 2008, and 2007, by our Chief Executive Officer, our Chief Financial Officer, and other three most highly-compensated executive officers.

Name and Principal Position	Year	Salary (\$) <sup>(1)</sup>	Bonus (\$) <sup>(2)</sup>	Stock Awards (\$) <sup>(3)</sup>	Option Awards (\$) <sup>(4)</sup>	Non-Equity Incentive Plan Compensation (\$) <sup>(5)</sup>	All Other Compensation (\$) <sup>(6)</sup>	Total (\$)
William B. Van	2009	\$413,848	\$	\$172,072	\$38,155	\$165,157	\$42,866	\$832,098
Vleet III President and Chief Executive	2008	\$352,011	\$50,000	\$80,790	\$38,259	\$30,120	\$35,333	\$586,513
Officer	•••	<b>***</b>		***	420.455	<b>**=</b> •••	004.400	<b>* 17</b> C O C <b>*</b>
	2007	\$296,770		\$43,467	\$38,155	\$57,331	\$21,138	\$456,862
James E. Doyle Vice President.	2009	\$316,778	_	\$57,846	\$36,630	\$108,176	\$292,321	\$811,751
Finance and Chief Financial	2008	\$314,068	_	\$46,988	\$92,890	\$25,162	\$32,173	\$511,281
Officer								
	2007	\$300,686		\$32,601	\$126,338	\$58,089	\$20,901	\$538,614
Dr. John R.	2009	\$327,758	_	\$61,327	\$41,811	\$108,678	\$255,375	\$794,949
Treichler Chief Technology	2008	\$320,577	_	\$46,988	\$91,175	\$25,684	\$34,118	\$518,542
Officer								
	2007	\$307,016		\$32,601	\$92,591	\$59,311	\$23,111	\$514,630
Renato F.	2009	\$300,363	_	\$72,398	\$67,633	\$106,675	\$31,343	\$578,411
Roscher, Jr. Vice President, Broadband	2008	\$294,042	_	\$58,088	\$73,803	\$34,158	\$26,053	\$486,144
Communications Division								
Division	2007	\$285,463	\$7,541	\$43,467	\$85,685	\$55,148	\$22,076	\$499,379
Dr. Michael J. Ready	2009	\$290,099	_	\$51,204	\$27,102	\$59,588	\$124,067	\$552,059
Chief Marketing Officer	2008	\$287,435	_	\$40,327	\$46,505	\$23,043	\$25,535	\$422,845
Officer	2007	\$272,823	_	\$26,080	\$46,378	\$52,708	\$17,887	\$415,876
	2007	4272,023		Ψ20,000	Ψ10,570	ΨυΣ,700	Ψ17,007	Ψ115,070

<sup>(1)</sup> Includes amounts (if any) deferred at the named executive officer's option under Applied Signal Technology's 401(k) plan.

<sup>(2)</sup> The amount shown for Mr. Van Vleet in fiscal 2008 represents a retention bonus paid to him in consideration of his service as Chief Executive Officer following the resignation of our former Chief Executive Officer.

The amount shown for Mr. Roscher in fiscal 2007 represents a cash award paid for achieving twenty years of service; similar awards are given to all employees that achieve this service goal.

we recognized compensation cost in fiscal year 2009, 2008, and 2007 for such awards, excluding the impact of estimated forfeitures related to service-based vesting conditions. The fair values of the shares of

restricted stock awarded were calculated based on the fair market value of our common stock on the respective grant dates.

years 2009, 2008,2007, and prior years, to the extent we recognized compensation cost in fiscal years 2009 or fiscal year 2008, or fiscal year 2007 for such awards, excluding the impact of estimated forfeitures related

to service-based vesting conditions. For a discussion of valuation assumptions used in calculation of stock-based compensation, see Note 1 of Notes to Consolidated Financial Statements, "Organization and Summary

of Significant Accounting Policies—Stock-Based Compensation" included in Part IV, Item 15 of our Annual Report on Form 10-K for the year ended October 31, 2009.

at the beginning of each fiscal year. See "Compensation Discussion and Analysis, Elements of Compensation and How Each Element is Chosen, Annual Incentive Compensation." The actual amount paid to each named

executive officer for the fiscal year ended October 31, 2009, is set forth in the Summary Compensation Table under the heading, "Non-Equity Incentive Plan Compensation." A description of the terms of the Annual

Incentive Plan is set forth in the Compensation Discussion and Analysis, above.

Name	Year	Retirement Bonus <sup>(a)</sup>	401(k) Employer <sup>(b)</sup>	Excess Life <sup>(c)</sup>	Dividends Received on Stock Awards <sup>(d)</sup>	Payments for Unused Vacation <sup>(e)</sup>	Total
W.H. D.M.	2009	\$—	\$9,519	\$1,120	\$20,256	\$11,971	\$42,866
William B. Van Vleet III	2008	\$15,107	\$9,200	\$1,055	\$9,971	_	\$35,333
	2007	\$6,611	\$8,967	\$729	\$4,832	_	\$21,138
	2009	\$—	\$9,519	\$1,120	\$7,250	\$274,432	\$292,321
James E. Doyle	2008	\$16,103	\$9,200	\$1,120	\$5,750	_	\$32,173
	2007	\$7,067	\$8,967	\$1,117	\$3,750	_	\$20,901
Dr. John R.	2009	\$—	\$9,519	\$3,215	\$7,750	\$234,891	\$255,375
Treichler	2008	\$15,955	\$9,200	\$3,213	\$5,750	_	\$34,118
	2007	\$7,188	\$8,967	\$3,206	\$3,750	_	\$23,111
D (F	2009	\$—	\$9,519	\$2,094	\$7,743	\$11,987	\$31,343
Renato F. Roscher, Jr.	2008	\$8,373	\$9,200	\$2,093	\$6,387	_	\$26,053
	2007	\$6,188	\$8,967	\$2,089	\$4,832	_	\$22,076
D. W. L. LL	2009	\$—	\$9,519	\$2,094	\$5,666	\$106,788	\$124,067
Dr. Michael J. Ready	2008	\$4,904	\$8,967	\$1,117	\$2,899	_	\$17,887

<sup>(3)</sup> The amounts shown are the compensation costs recognized in our financial statements for fiscal years 2009, 2008, and 2007 related to shares of restricted stock awarded to the executive officer, to the extent

<sup>(4)</sup> The amounts shown are the compensation costs recognized in our financial statements for fiscal years 2009, 2008 and fiscal year 2007 related to grants of stock options to each named executive officer in fiscal

<sup>(5)</sup> We award bonuses pursuant to an Annual Incentive Plan, which provides for the award of annual cash bonuses based upon threshold, target, and maximum payout amounts set by the Compensation Committee

<sup>(6)</sup> The compensation represented by the amounts for fiscal year 2009, 2008 and fiscal year 2007 set forth in the All Other Compensation column for the named executive officers are detailed in the following table.

	2007	\$4,904	\$8,967	\$1,117	\$2,899	_	\$17,887
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<sup>(</sup>a) Represents four percent of the salary over the maximum annual federal limit of the Company-funded Applied Signal Technology 401(k) Retirement Plan contributions.

These amounts were accrued at the end of each fiscal year and paid during the following fiscal year. For fiscal year 2009, this plan was amended such that the we no longer contributed four percent of the salary.

#### **Grants of Plan-based Awards**

The following table sets forth certain information with respect to stock and option awards granted during the fiscal year ended October 31, 2009, to our named executive officers.

			Estimated Future Payouts Under Non-equity Incentive Plan Awards <sup>(1)(2)</sup>			Grant Date Fair Value of Stock	
Name	Grant Date	Threshold (\$)	o Target (\$) Maximum (\$)		of Shares of Stock or Units (#) <sup>(3)</sup>	and Option Awards (\$) <sup>(4)</sup>	
William B. Van Vleet III	11/19/08	\$—	\$145,250	\$217,875	7,500	\$110,250	
James E. Doyle	11/19/08	\$—	\$95,138	\$142,706	3,000	\$44,100	
Dr. John R. Treichler	11/19/08	\$	\$98,548	\$147,822	4,000	\$58,800	
Renato F. Roscher, Jr.	11/19/08	\$—	\$90,309	\$135,463	4,000	\$58,800	
Dr. Michael J. Ready	11/19/08	\$—	\$72,604	\$108,906	3,000	\$44,100	

<sup>(1)</sup> We award bonuses pursuant to an Annual Incentive Plan, which provides for the award of annual cash bonuses based upon threshold, target, and maximum payout amounts set by the Compensation

Committee at the beginning of each fiscal year. See "Compensation Discussion and Analysis, Elements of Compensation and How Each Element is Chosen, Annual Incentive Compensation." The actual

amount paid to each named executive officer for the fiscal year ended October 31, 2009 is set forth in the Summary Compensation Table under the heading "Non-Equity Incentive Plan Compensation."

See the disclosure under "Compensation Discussion and Analysis—Elements of Compensation and How Each Element is Chosen—Annual Incentive Compensation" for a discussion of the terms under which awards are payable under the Annual Incentive Plan.

<sup>(</sup>b) Represents the company-funded Applied Signal Technology 401(k) Retirement Plan contributions.

<sup>(</sup>c) Represents the payment of excess life insurance benefits.

<sup>(</sup>d) The amounts shown represent the dividend payments received during fiscal year 2009, associated with restricted stock awards.

<sup>(</sup>e) Represents accrued, but unused, vacation that was paid as a result of a change to our vacation policy.

<sup>(2)</sup> The threshold amounts included in the table above reflect the minimum payment level under the Annual Incentive Plan, as the 2009 Annual Incentive Plan has a minimum threshold that had to be reached before payments were triggered. The minimum, target and maximum amounts are reflected on an annualized basis.

<sup>(3)</sup> These amounts represent shares of restricted stock granted in fiscal year 2009, pursuant to our 2004 Stock Incentive Plan. The shares of restricted stock vest at the rate of 25% on each anniversary of the date of grant, and are fully vested at the end of four years, so long as the employee remains an employee of Applied Signal Technology at each vesting date.

<sup>(4)</sup> The dollar value of restricted stock shown represents the grant date fair value calculated based on the fair market value of our common stock on the respective grant dates. The actual value that an

executive will realize on each share of restricted stock award will depend on the price per share of our common stock at the time the shares of restricted stock are sold. There can be no assurance that

the actual value realized by an executive will be at or near the grant date fair value of the restricted stock awarded.

## **Outstanding Equity Awards at Fiscal Year-End**

The following table sets forth certain information with respect to the value of all unexercised options previously awarded to our named executive officers as of October 31, 2009.

				Option A	wards Stock Av	wards —
Name	Number of Securities Underlying Unexercised Options (#) Exercisable <sup>(1)</sup>	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#) <sup>(2)</sup>	Market Value of Shares or Units of Stock That Have Not Vested (\$) <sup>(3)</sup>
						\$25,613
						\$51,225
					1,250 <sup>(5)</sup>	\$92,205
William B.					2,500 <sup>(6)</sup> 4,500 <sup>(7)</sup>	\$307,350
Van Vleet III	16,000	4,000 <sup>(4)</sup>	\$18.85	7/1/2015	15,000 <sup>(8)</sup> 7,500 <sup>(9)</sup>	\$153,675
						\$19,199
	15,246 1,004		\$12.30 \$12.30	2/24/2013 2/24/2013		\$38,398
	5,899		\$26.10	3/11/2014	937 <sup>(5)</sup>	\$61,470
James E.	9,035	2 000(10)	\$32.19	1/10/2013	3,000 <sup>(7)</sup>	\$61,470
Doyle	2,965	3,000	\$32.19	1/10/2013	3,000	\$19.199
	12,049		\$26.10	3/11/2014	937 <sup>(5)</sup>	
	2,951		\$26.10	3/11/2014	$1,874^{(6)}$	
Dr. John R. Treichler	3,846	3,000 <sup>(10)</sup>	\$32.19	1/10/2013	4,000 <sup>(9)</sup>	\$81,960
						\$25,613
						\$51,225
	12 000		\$13.39	2/28/2013	1,250 <sup>(5)</sup> 2,500 <sup>(6)</sup>	\$61,470
Roscher,	9,240 6,760	3,106 <sup>(10)</sup> 894 <sup>(10)</sup>	\$32.19 \$32.19	1/10/2013 1/10/2013	3,000 <sup>(7)</sup> 4,000 <sup>(9)</sup>	\$81,960
Dr. John R. Treichler	9,101 9,035 2,965 12,049 2,951 8,154 3,846	3,106 <sup>(10)</sup>	\$26.10 \$32.19 \$32.19 \$32.19 \$26.10 \$26.10 \$32.19 \$32.19	3/11/2014 1/10/2013 1/10/2013 3/11/2014 3/11/2014 1/10/2013 1/10/2013	1,874 <sup>(6)</sup> 3,000 <sup>(7)</sup> 3,000 <sup>(9)</sup> 937 <sup>(5)</sup> 1,874 <sup>(6)</sup> 3,000 <sup>(7)</sup> 4,000 <sup>(9)</sup> 1,250 <sup>(5)</sup> 2,500 <sup>(6)</sup> 3,000 <sup>(7)</sup>	\$61,470 \$19,199 \$38,398 \$61,470 \$81,960 \$25,613 \$51,225 \$61,470

						\$15,368
						\$30,735
					750 <sup>(5)</sup> 1,500 <sup>(6)</sup>	\$61,470
Michael Ready	9,600 10,000	2,400 <sup>(11)</sup>	\$20.46 \$20.85	8/18/2013 12/15/2013	3,000 <sup>(7)</sup> 3,000 <sup>(9)</sup>	\$61,470

<sup>(1)</sup> Each option vests and becomes exercisable at the rate of 20% per year in five successive annual installments upon the executive's completion of each year of service over a five-year service period, measured from the grant date.

- (2) Each restricted stock award vests and becomes exercisable at the rate of 25% per year in four successive annual installments upon the executive's completion of each year of service over a four-year service period, measured from the award date., and shall be subject to automatic forfeiture if the recipient's performance of services with us terminates prior to the date on which the shares vest.
- (3) Represents the fair market value per share of our common stock, being the closing sales price on the NASDAQ Global Market on October 30, 2009 (\$20.49), multiplied by the number of shares that had not vested as of October 31, 2009.
- (4) The original grant date of this option was July 1, 2005. Subject to ongoing service requirements, this option vests 20% per year on the anniversary of the date of grant, with full vesting on July 1, 2010.
- (5) The original grant date of this award was April 10, 2006. Subject to ongoing service requirements, the remaining portion of such award vests in full on April 10, 2010.
- (6) The original grant date of this award was November 15, 2006. Subject to ongoing service requirements, such shares vest 25% on each anniversary of the date of grant, with vesting in full on November 15, 2010.
- (7) The original grant date of this award was November 14, 2007. Subject to ongoing service requirements, such shares vest 25% on each anniversary of the date of grant, with vesting in full on November 14, 1011.
- (8) The original grant date of this award was August 20, 2008. Subject to ongoing service requirements, such shares vest 25% per year on the anniversary of the date of grant, with full vesting on August 20, 2012.
- (9) The original grant date of this award was November 19, 2008. Subject to ongoing service requirements, such shares vest 25% on each anniversary of the date of grant, with full vesting on November 19, 2012.
- <sup>(10)</sup> The original grant date of this option was January 10, 2005. Subject to ongoing service requirements, the remaining portion of such award vests in full on January 10, 2010.
- (11) The original grant date of this option was August 18, 2005. Subject to ongoing service requirements, the remaining portion of such award vests in full on August 18, 2010.

## Option Exercises and Stock Vested During Last Fiscal Year

The following table sets forth certain information concerning option exercises by our named executive officers during the fiscal year ended October 31, 2009.

### 2009 Option Exercises and Stock Vested

	- <del>Option .</del>	-Stock /	<del>Awar</del> ds ———	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$) <sup>(1)</sup>	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) <sup>(2)</sup>

William B. Van Vleet III	<del>-</del>	_	9,000	\$194,815
James E. Doyle	15,000	\$293,550	2,875	\$51,664
Dr. John R. Treichler	15,000	\$169,050	2,875	\$51,664
Renato F. Roscher, Jr.	8,000	\$108,480	3,500	\$63,335
Dr. Michael Ready	_	_	2,500	\$44,665

<sup>(1)</sup> The value realized on exercise is the difference between the fair market value on the date of exercise, being the market price of our common stock on the date

## **Executive Employment Agreements**

#### **Executive Retention and Severance Plan**

On August 18, 2004, the Compensation Committee adopted the Executive Retention and Severance Plan (the "Executive Severance Plan"), which provides certain benefits to the Company's executive officers and key employees upon involuntary termination of employment and in connection with a change in our control.

A participant who is terminated without cause or resigns following certain adverse changes in employment circumstances, including any such termination or resignation that occurs during a period from the first public announcement of a change in control and ending 12 months after a change in control will be entitled to specified severance benefits. In addition to accrued compensation, including any earned but unpaid prior year bonus, and benefits earned under our employee benefit and equity compensation plans, the terminated participant will receive cash severance payments equal to the aggregate of the participant's base salary for a period of 24 months in the case of the chief executive officer, and 12 months in the case of other executive officers, plus an amount equal to the participant's annual bonus for one year. In addition, participants will be entitled to receive for the same respective periods employer-paid health benefits substantially similar to those provided immediately prior to the termination. Provision of all such benefits is conditioned upon the participant's execution of a release of claims against us and entry into a covenant not to compete with us set forth in a restrictive covenants agreement. The participant may elect to terminate the restrictive covenants agreement, including the termination of the non-competition agreement, in exchange for forfeiting any additional severance payments payable after such termination.

The Executive Severance Plan provides that if, in the event of a change in our control, the company acquiring Applied Signal Technology does not assume the outstanding stock options of the participants in the Executive Severance Plan or substitute equivalent options for the acquiring company's stock, then the vesting and exercisability of the participants' options will be accelerated in full ten days prior to, but conditioned upon, the consummation of the change in control transaction. Furthermore, upon a change in control, any restricted stock or restricted stock unit awards held by participants in the Executive Severance Plan will vest in full. The treatment of any other stock options or other stock-based awards held by Executive Severance Plan participants upon a change-in-control will be determined under the plans or agreements providing for such options or awards.

Following a participant's termination of employment, the participant will be indemnified by us to the fullest extent permitted under applicable law and will be provided with directors' and officers' liability insurance (if applicable) for a period of six years, each as set forth in the Executive Severance Plan. If any payment or benefit received or to be received by the executive officer pursuant to the Executive Severance Plan or otherwise would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code, then we will pay the executive officer only such amounts as will not exceed the amount that produces the greatest after-tax benefit to the participant.

For purposes of this Executive Severance Plan, a change in control means the occurrence of any of the following:

- Any person or entity becomes the beneficial owner, directly or indirectly, of more than fifty percent (50%) of our outstanding shares of common stock
- We are a party to a merger, consolidation, or similar corporate transaction, or series of related transactions, which results in the holders of our voting securities outstanding immediately prior to such transaction(s) failing to retain immediately after such transaction(s) direct or indirect beneficial ownership of more than fifty percent (50%) of our outstanding shares of stock

of exercise, and the exercise price.

<sup>(2)</sup> The value realized on vesting is determined by multiplying the number of shares of stock by the market value of the underlying shares on the vesting date, based

upon the market price of our common stock on the vesting date.

- The sale or disposition of all or substantially all of our assets or consummation of any transaction, or series of related transactions, having similar effect
- A change in the composition of the Board within any consecutive two-year period as a result of which fewer than a majority of the directors are incumbent directors

"Cause" means the occurrence of any of the following, as determined in good faith by a vote of not less than two-thirds of the entire membership of the Board at a meeting of the Board called and held in whole or in part for such purpose:

- The executive's commission of any material act of fraud, embezzlement, dishonesty, intentional falsification of any employment or other Company records, or any criminal act which impairs his or her ability to perform his or her duties
- The executive's willful misconduct, breach of fiduciary duty for personal profit or material failure to abide by our code of conduct or other policies
- The executive's unauthorized use or disclosure of confidential information or trade secrets of ours
- The executive's conviction for a felony causing material harm to our reputation and standing

"Good Reason" means the occurrence during the two-year period following a change in our control of any of the following conditions without the executive's consent:

- A material, adverse change in the executive's position, duties, substantive functional responsibilities, or reporting responsibilities, causing the executive's position to be of materially lesser rank or responsibility
- A decrease in the executive's base salary rate or target bonus amount
- Any failure to continue to provide the executive with the opportunity to participate in any benefit or compensation plans and programs in which the executive was participating immediately prior to such failure, or to provide the executive with all other fringe benefits from time to time in effect for the benefit of any employee group that customarily includes a person holding the employment position or a comparable position then held by the executive
- The relocation of the executive's work place to a location that increases the regular commute distance by more than thirty (30) miles, or, following the consummation of a change in our control, the imposition of business travel requirements substantially more demanding than such travel requirements existing immediately prior to the change in control
- Following the consummation of a change in control, any material breach of the Executive Severance Plan

#### Acceleration of Director Options upon a Change in Control

Options to purchase our common stock and restricted stock granted to our non-employee directors provide that in the event of a change in our control, each outstanding option, and each share of restricted stock, held by a non-employee director whose service as a director has not terminated prior to such date shall be vested in full, and in the case of stock options, immediately exercisable and vested in full as of the date ten days prior to the change in control.

#### Calculation of Potential Payments upon Termination or Change of Control

The following table presents our estimate of the dollar value of the benefits payable to our named executive officers upon a termination of employment with or without cause, or a change in our control, assuming such terminating event occurred on October 31, 2009. These benefits are in addition to accrued compensation and accrued paid time off, otherwise required by law to be paid through the date of termination of employment.

This table assumes that the termination occurred as of October 31, 2009, and, in connection with a termination that occurred as a result of a change of control, that outstanding unvested equity awards were neither assumed by the successor corporation nor replaced with a cash retention program. While we believe that the amounts shown above and the assumptions upon which they are based provide reasonable estimates of the amounts that would have been due to the named executive officers in the event that any of the circumstances described above had occurred on October 31, 2009, the actual amounts due to the named executive officers upon a triggering event will depend upon the actual circumstances.

Name	Trigger Event	Non-equity Incentive Plan Compensation	Severance	Continuation of Benefits <sup>(1)</sup>	Value of Option Acceleration <sup>(2)</sup>	Value of Restricted Stock Acceleration <sup>(2)</sup>	Total Value <sup>(3)</sup>
	Involuntary Termination	\$165,157	\$975,253	\$34,539	\$—	\$—	\$1,174,949
William B. Van		\$165,157	\$975,253	\$34,539	\$26,240	\$842,651	\$2,043,840

Vleet III

	Change in Control						
	Death, Disability, Retirement	\$165,157	\$	\$	- \$	\$	\$165,157
	Involuntary Termination	\$108,176	\$412,275	\$21,135	\$—	\$—	\$541,586
	Change in Control	\$108,176	\$412,275	\$21,135	\$133,088	\$248,421	\$923,094
James E. Doyle	Death, Disability, Retirement	\$108,176	\$—	\$	- \$—	\$	\$108,176
	Involuntary Termination	\$108,678	\$427,043	\$13,406	\$—	\$—	\$549,127
Dr. John	Change in Control	\$108,678	\$427,043	\$13,406	\$—	\$304,768	\$853,895
R. Treichler	Death, Disability, Retirement	\$108,678	\$—	\$—	- \$—	<b>\$</b> —	\$108,678
	Involuntary Termination	\$106,675	\$391,347	\$16,968	\$—	\$	\$514,990
Renato F.	Change in Control	\$106,675	\$391,347	\$16,968	\$85,200	\$276,615	\$876,805
Roscher, Jr.	Death, Disability, Retirement	\$106,675	\$—	\$—	- \$—	<b>\$</b> —	\$106,675
	Involuntary Termination	\$59,588	\$363,035	\$12,910	\$—	\$	\$435,533
Dr.	Change in Control	\$59,588	\$363,035	\$12,910	\$288	\$117,818	\$553,638
Michael Ready	Death, Disability, Retirement	\$59,588	\$—	\$	- \$—	<b>\$</b> —	\$59,588

<sup>(1)</sup> Represents the aggregate value of reimbursement of COBRA benefits after the date of termination. For the purposes of this calculation, expected costs have not been adjusted for any actuarial assumptions related to mortality, likelihood that the executives will find other employment, or discount rates for determining present value.

The amounts shown as the value of the accelerated stock options are based solely on the intrinsic value of the options as of October 31, 2009. For options, this was calculated by multiplying (i) the difference between the fair market value of our common stock on October 30, 2009, \$20.49, and the applicable exercise price by (ii) the assumed number of option shares vesting on an accelerated basis on October 31, 2009.

The amount shown as the value of the accelerated shares of restricted stock represents the fair value calculated based on the fair market value of our common stock on October 30, 2009, \$20.49, multiplied by the assumed number of shares of restricted stock vesting on an accelerated basis on October 31, 2009.

<sup>(2)</sup> Represents the aggregate value of the accelerated vesting of the executive officer's unvested stock options and shares of restricted stock.

(3) Excludes the value to the executive of the continuing right to indemnification and continuing coverage under our directors' and officers' liability insurance (if applicable).

In addition, upon death or disability, each of our executive officers is entitled to coverage under our applicable insurance policies. We also provide death benefits of an insured sum equal to two times their annual salary up to a maximum of \$500,000, plus an additional amount equal to two times their annual salary up to a maximum of \$500,000 if such death occurs as a result of an accident. Executive officers are fully vested in 100% of their account balance under the Retirement Savings Plan (401(k) Plan). All of our employees are eligible for continuing health coverage under COBRA.

#### **Related Person Transactions**

Although we have not historically entered into any transactions with related persons, if any were to be contemplated, our Audit Committee would be responsible for reviewing and approving any related-party transactions, after reviewing each such transaction for potential conflicts of interests and other improprieties. In addition, the Audit Committee is responsible for reviewing and investigating conduct alleged by the Board of Directors to be in violation of our Code of Business Conduct and Ethics, and adopting as necessary or appropriate, remedial, disciplinary, or other measures with respect to such conduct. Pursuant to our Code of Business Conduct and Ethics, our employees, including our executive officers, are prohibited from entering into transactions in which personal, family, or financial interests conflict or even appear to conflict with our interests or compromise such interests. Under the Code of Business Conduct and Ethics, a "conflict of interest" exists when a person's private interest interferes in any way with our interests. A conflict situation can arise when an employee, officer, or director takes action or has interests that may make it difficult to perform his or her Company work objectively and effectively. Conflicts of interest may also arise when an employee, officer, or director, or a member of his or her family, receives improper personal benefits as a result of his or her position with us. Loans to, or guarantees of obligations of, employees and their family members may create conflicts of interest.

#### **Transaction of Other Business**

At the date of this Proxy Statement, the Board of Directors knows of no other business that will be conducted at the 2010 Annual Meeting other than as described in this Proxy Statement. If any other matter or matters are properly brought before the meeting, or any adjournment or postponement of the meeting, it is the intention of the persons named in the accompanying form of proxy to vote the proxy on such matters in accordance with their best judgment.

By order of the Board of Directors,

William B. Van Vleet III Chief Executive Officer

February 5, 2010